



EUROPEAN COMMISSION
DG Competition

PUBLIC VERSION

CASE M.8947

NIDEC / WHIRLPOOL (EMBRACO BUSINESS)

(Only the English text is authentic)

**MERGER PROCEDURE
REGULATION (EC) 139/2004**

Article 8(2) Regulation (EC) 139/2004

Date: 12/4/2019

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Brussels, 12.4.2019
C(2019) 2734 final

COMMISSION DECISION

of 12.4.2019

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

(Case M.8947 - NIDEC / WHIRLPOOL (EMBRACO BUSINESS))

(Text with EEA relevance)

(Only the English text is authentic)

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COMMISSION DECISION

of 12.4.2019

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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 undertakings¹, and in particular Article 8(2) thereof,

Having regard to the Commission's decision of 28 November 2018 to initiate proceedings in this case,

Having regard to the opinion of the Advisory Committee on Concentrations²,

Having regard to the final report of the Hearing Officer in this case³,

Whereas:

1. INTRODUCTION

- (1) On 8 October 2018, the European Commission (the "Commission") received a notification of a proposed concentration pursuant to Article 4 of Regulation (EC) No 139/2004 (the "Merger Regulation") by which Nidec Corporation ("Nidec" or the "Notifying Party", Japan) intends to acquire, within the meaning of Article 3(1)(b) of the Merger Regulation, sole control of the refrigeration compressor business of Whirlpool Corporation (USA), Embraco ("Embraco", Brazil) (the "Transaction").⁴ Nidec and Embraco are collectively referred to as the "Parties".
- (2) Nidec is a Japanese company active in the engineering, manufacture, and distribution of a range of electric motors and motor application products. Since its acquisition of Secop GmbH ("Secop") in 2017, Nidec also manufactures and sells compressors for

¹ OJ L 24, 29.1.2004, p. 1 ("the Merger Regulation"). 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 will be used throughout this decision.

² OJ C200. , p....

³ OJ C200. , p....

⁴ OJ C 374, 16.10.2018, p. 13.

use in refrigeration appliances. Nidec manufactures compressors in Austria, Slovakia and China.

- (3) Embraco, headquartered in Brazil, is active in the manufacture and sale of compressors for use in refrigeration appliances. Embraco manufactures compressors in Slovakia, Brazil, Mexico and China. Embraco is owned and controlled by Whirlpool, a US company that manufactures a full line of home appliances and related products, including refrigeration appliances. Whirlpool's brands include Whirlpool, KitchenAid, Maytag, Indesit, Hotpoint, Consul and Brastemp.

2. THE OPERATION AND THE CONCENTRATION

- (4) On 24 April 2018, Whirlpool and Nidec signed a Share Purchase Agreement according to which Nidec would acquire all of the shares in Embraco for a price of USD 1.08 billion.
- (5) The completion of the Transaction would thus result in Nidec obtaining sole control over Embraco within the meaning of Article 3(1)(b) of the Merger Regulation.

3. UNION DIMENSION

- (6) The undertakings concerned have a combined aggregate world-wide turnover of more than EUR 5,000 million⁵ (Nidec: EUR 10 223 million; Embraco: EUR [...]; Parties' combined: EUR [...]). Each of them has an EU-wide turnover in excess of EUR 250 million (Nidec: EUR [...]; Embraco: [...]), but each does not achieve more than two-thirds of its aggregate Union-wide turnover within one and the same Member State.
- (7) Embraco's Union-wide turnover in 2017 was [details on turnover calculation].
- (8) The Parties [details on geographic allocation of turnover].
- (9) The Parties argued that [details on geographic allocation of turnover], and was therefore the best available source of data for geographic allocation of Embraco turnover for the purposes of determining whether the EU Merger Regulation's jurisdictional thresholds are met.
- (10) On the basis of the information provided by the Parties, the Commission accepted Embraco's methodology for the geographic allocation of turnover due to the fact that, [details on geographic allocation of turnover]. Therefore, according to the Parties' best knowledge, [details on geographic allocation of turnover].

4. THE PROCEDURE

- (11) During the Phase I market investigation the Commission reached out to a large number of market participants (customers of the Parties and competitors), by requesting information through e-Questionnaires, telephone calls and written requests for information pursuant to Article 11 of the Merger Regulation.
- (12) In addition, the Commission also sent several written requests for information to the Parties and reviewed internal documents of the Parties submitted at this stage.

⁵ Turnover calculated in accordance with Article 5(1) of the Merger Regulation and the Commission Consolidated Jurisdictional Notice under Council Regulation (EC) No 139/2004 on the control of concentrations between undertakings (OJ C95, 16.4.2008, p. 1).

- (13) On 29 October 2018, the Commission informed the Parties of the serious doubts arising from the preliminary assessment of the Transaction during a "State of Play" meeting.
- (14) In order to remove the serious doubts raised by the Transaction in the markets for variable speed household refrigeration compressors and both fixed and variable speed light commercial refrigeration compressors, on 6 November 2018 the Parties formally submitted commitments essentially proposing to divest Nidec's plant in Slovakia. These commitments were not market tested as they did not address the full scope of the Commission's serious doubts.
- (15) On 7 November 2018, the Parties formally submitted revised commitments, consisting of the divestment of Nidec's plant in Slovakia, with the addition of one light commercial refrigeration compressors production line from Embraco (the MIDI line), which would have been transferred from Embraco's plant in Slovakia. In the Commission's view, these commitments equally lacked sufficient scope to address the serious doubts in relation to light commercial refrigeration compressors in a clear-cut manner, in addition to being a "mix-and-match" solution and thus raised concerns about the viability of such a combination. Therefore, the Commission decided not to carry out a market test.
- (16) On 9 November 2018, the Parties formally submitted a third set of commitments, consisting of Nidec's plants in Slovakia and China. These commitments were then supplemented on the same day with some intellectual property licences for planned improvements to the Delta- and Kappa-Series light commercial refrigeration compressors. These commitments were market tested.
- (17) However, in view of the outcome of its Phase I investigation and the results of the market test, the Commission considered that the commitments submitted by the Parties did not meet the required standards to eliminate the Commission's serious doubts on the Transaction.
- (18) On 28 November 2018, the Commission therefore found that the Transaction raised serious doubts as to its compatibility with the internal market and the EEA Agreement and adopted a decision to initiate proceedings pursuant to Article 6(1)(c) of the Merger Regulation (the "Article 6(1)(c) decision").
- (19) On 3 December 2018, the Commission provided a number of key documents to the Notifying Party. Additional key documents were provided by the Commission to the Notifying Party on 5 December 2018. The Notifying Party submitted its written response to the Article 6(1)(c) decision on 10 December 2018 (the "Response to the Article 6(1)(c) decision").
- (20) On 12 December 2018, at a State of Play meeting, the Commission provided the Parties with the opportunity to discuss the main issues raised in their Response to the Article 6(1)(c) decision, and indicated the matters on which it planned to focus its further investigative efforts during the Phase II investigation. During the Phase II investigation, the Commission sent several requests for information to the Parties.
- (21) The Commission also held several calls with market participants, and sent requests for information in the form of a questionnaire to customers of variable speed compressors for household refrigeration appliances. In addition, the Commission also sent a data request to customers of variable speed compressors for household refrigeration appliances with a view to conducting a market reconstruction analysis.
- (22) The Parties indicated in the early days of the Phase II investigation, and in particular during the State of Play meeting held on 12 December 2018, that they would be

interested in obtaining feedback from the market investigation as soon as possible after the Commission had obtained results from the investigation. In the spirit of providing the Parties with an opportunity to remedy any preliminary competition concerns prior to adopting a Statement of Objections, following the results of the Phase II market investigation a State of Play meeting was held on 23 January 2019. During the meeting, the Commission informed the Parties of the preliminary results of the Phase II market investigation and the scope of the preliminary concerns of the Commission.

- (23) On 28 January 2019, the merger review time period was extended by 10 working days following the Parties' request pursuant to Article 10(3) of the Merger Regulation.
- (24) In order to address the preliminary competition concerns identified by the Commission at the State of Play meeting held on 23 January 2019, Nidec submitted commitments on 7 February 2019. The Commission launched a market test of those commitments on 11 February 2019.
- (25) On 11 February 2019, the merger review time period was extended by 5 working days, and on 21 February 2019 by another 5 working days following the Parties' requests pursuant to Article 10(3) of the Merger Regulation.
- (26) Nidec submitted final commitments on 28 February 2019.
- (27) The meeting of the Advisory Committee took place on 29 March 2019 and issued a favourable opinion on the draft Decision on the same day.
- (28) The Hearing Officer issued his final report on 1 April 2019.

5. RELEVANT MARKETS

5.1. Introduction

- (29) Nidec and Embraco overlap in the manufacture and sale of compressors for use in refrigeration appliances. Refrigeration compressors are electro-mechanical devices used to lower the temperature of an enclosed space (such as a freezer or refrigerator) by compressing vaporised refrigerant to remove heat from that space and transfer it elsewhere. Figure 1 illustrates the operation of a basic refrigeration system.

Figure 1 – Basic refrigeration system in a refrigerator

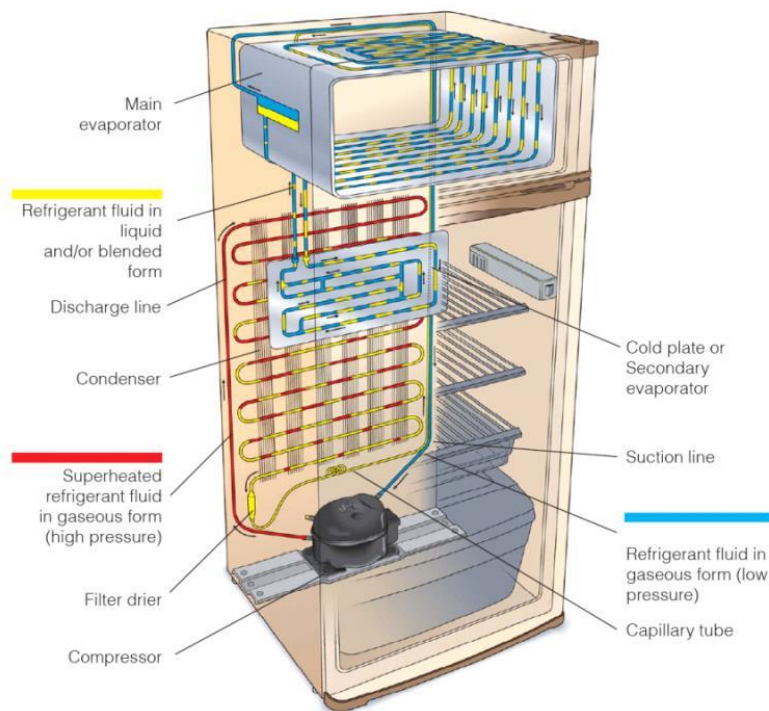


Figure 1 - Operation of a basic refrigeration system

Source: Form CO, Figure 1 at paragraph 7.

- (30) Nidec entered the refrigeration compressors business in 2017 when it acquired Secop.⁶ Embraco has been active in the manufacture and sale of compressors since 1974. Whirlpool acquired a majority stake in Embraco in 1997.⁷
- (31) Refrigeration compressors may be used for household applications (for example refrigerators and freezers) or for light commercial applications (for example soft drink coolers, vending machines, display cabinets, or ice cream coolers).
- (32) There are many types of refrigeration compressors (for example scroll, rotary, semi-hermetic, hermetic reciprocating). Embraco and Nidec principally manufacture hermetic reciprocating compressors which can be installed in refrigeration appliances used in household or light commercial applications. Reciprocating compressors are compressors which generate pressure through pistons which are attached to a rotary crankshaft. “Hermetic” reciprocating compressors are devices in which both the compressor and the motor which drives the compressor are contained in the same, hermetically sealed encasement. These refrigeration compressors all use alternating current (“AC”).
- (33) Nidec also manufactures direct-current (“DC”) compressors for use in mobile refrigeration devices in for example lorries, vans, or cars. Embraco does not manufacture DC compressors or compressors for mobile use.
- (34) Household refrigeration compressors are mainly used in refrigerators and freezers for residential use. A household refrigeration compressor typically is able to displace

⁶ Form CO, paragraphs 2 and 7.

⁷ Form CO, paragraph 7.

around 1.5 cm³ to 12 cm³ of refrigerant (referred to as the compressor's "displacement capacity").

- (35) Light commercial refrigeration compressors are mainly used in beverage coolers, glass door merchandisers, commercial refrigerators and freezers, display cabinets and supermarket merchandisers, water coolers, ice-making machines and ice cream cabinets for commercial use. The displacement capacity of light commercial refrigeration compressors typically ranges from around 1.5 cm³ to 28 cm³.
- (36) Refrigeration compressors may either run at a fixed speed ("fixed speed compressors" or "single speed compressors"), regulating the temperature by turning on and off as needed; or variable speed ("variable speed compressors"), adjusting the speed at which they run depending on the need for cooling in order to maintain the desired temperature. Variable speed compressors tend to be more energy efficient, quieter and more expensive than fixed speed compressors with the same cooling capacity. Variable speed compressors are more common in household than in light commercial refrigeration appliances.
- (37) As regards regulation, there has been a drive to introduce more environmentally-friendly refrigerants. Hydrocarbon ("HC") refrigerants (R600 and R290) are more environmentally friendly than hydrofluorocarbon ("HFC") refrigerants (R134/R404).⁸ Indeed, according to Union regulation a move away from HFCs shall take place in the commercial refrigeration sector from 2020.⁹ The Parties, together with other competitors, are shifting to the production of appliances compatible with HC refrigerants.
- (38) Other major refrigeration compressor manufacturers include the following companies:
- (a) Sichuan Changhong Electric Co., Ltd. ("Changhong"), is a Chinese manufacturer which acquired the Spanish manufacturer Cubigel in 2012 and also sells under the brands Huayi and Jiaxipera. Huayi has operations in Europe through Huayi Compressor Barcelona, S.L which specialises in designing, manufacturing and selling hermetic compressors and condensing units for the light commercial refrigeration market.
 - (b) Italia Wanbao/ACC S.r.l. ("Wanbao/ACC"), a company which was established through the acquisition in 2014 of the Italian parts of ACC by Wanbao, a Chinese group active in refrigeration technology. Wanbao/ACC's plant in Italy has designed and manufactured hermetic refrigeration compressors for domestic appliances since 1968.
 - (c) Huangshi Dongbei Refrigeration Co., Ltd. (selling compressors under the brand "Donper"), is a Chinese State-owned manufacturer that supplies refrigeration compressors and components internationally.
 - (d) Tecumseh Products Company ("Tecumseh") is an American manufacturer of hermetically sealed compressors for residential and specialty air conditioning, household refrigerators and freezers as well as commercial refrigeration applications. Tecumseh acquired the French manufacturer L'Unité Hermétique

⁸ Form CO, paragraph 702.

⁹ Regulation (EU) No 517/2014 of the European Parliament and of the Council of 16 April 2014 on fluorinated greenhouse gases and repealing Regulation (EC) No 842/2006, OJ L 150, 20.5.2014, p. 195–230, Annex III.

in 1988. Tecumseh is currently a joint venture between Atlas Holdings and Mueller Industries, Inc.

- (e) Samsung, LG and Panasonic are vertically integrated manufacturers that produce refrigeration compressors for their captive use and to some extent also for the merchant market, while at the same time being the manufacturers of refrigeration appliances.
 - (f) Other Chinese manufacturers include Guangdong Meizhi Compressor Company (“GMCC”), Zanussi Elettromeccanica Tianjin Compressor Co., Ltd (“ZEL”) and Hangzhou Qianjiang Compressor Co. Ltd (“Qianjiang”).
- (39) While players such as Embraco or Nidec (through the acquisition of Secop¹⁰) are established players with a history of manufacturing refrigeration compressors, the industry has seen also entry and expansion of new players. In particular, there has been a trend of Chinese manufacturers expanding into the European market in the more commoditised, high-volume fixed speed household refrigeration compressors market. It seems that by now virtually all players on the market are capable of producing fixed speed household refrigeration compressors. At the same time, brand awareness is still present in the industry and the reputation of producers such as Embraco or Nidec is widely considered as excellent and a guarantee of quality.¹¹
- (40) Some of the Chinese manufactures have also been trying to enter other refrigeration compressor markets, for example household variable speed compressors or light commercial (fixed and variable speed), however, as further explained below, their entry has not yet been significant into these markets where more advanced technology and R&D investment is required.

5.2. Relevant product market definition

5.2.1. The Notifying Party's arguments

- (41) The Notifying Party argued that there is one single market for all refrigeration compressors, comprised of all household and light commercial compressors and in particular, that there is extensive supply-side substitution, for the following reasons:¹²
- (a) All refrigeration compressors share the same basic technology, tools, equipment, and components;
 - (b) Producers typically manufacture a broad range of refrigeration compressors of varying sizes, displacement and cooling capacities;
 - (c) Products for a wide range of end-use applications are manufactured on the same production lines;
 - (d) Suppliers can, and do, switch production between different models of refrigeration compressors on the same lines in a matter of hours (including between household and light commercial).¹³

¹⁰ For the history of Nidec’s Global Appliances division see e.g, Nidec’s internal document, presentation titled “Nidec GA Compressor Product Portfolio” dated 6 March 2018, slide 2, Doc Id: 1510-33968 (NID00143276.pptx).

¹¹ See for example replies to Questionnaire on Commitments offered by Nidec, q. 2.1 and q. 16.

¹² Form CO, paragraph 17.

¹³ Form CO, paragraph 144 et seq.

- (42) Moreover, the Notifying Party argued that all refrigeration compressors perform the same basic function.¹⁴
- (43) From a demand-side perspective, the Notifying Party argued that the same refrigeration compressors are generally suitable for installation in a range of different end-use application systems. There is considerable overlap in the displacement ranges of household refrigeration compressors and light commercial refrigeration compressors. As a result, compressors produced on the same production line can be installed in a household refrigerator, a commercial vending machine, a beverage dispenser, or an ice cream freezer.¹⁵
- (44) The Notifying Party did not consider that notional product markets in respect of household or light commercial refrigeration compressors should be further segmented, including on the basis of displacement capacity or use of fixed speed or variable speed technology.¹⁶
- (45) Regarding the distinction between fixed and variable speed refrigeration compressors, the Notifying Party argued that these belong to the same product market because:¹⁷
- (a) All major suppliers of refrigeration compressors produce both fixed and variable speed refrigeration compressors;
 - (b) There is a chain of substitution as between refrigeration compressors of different efficiency levels and variable speed refrigeration compressors;
 - (c) The majority of the Parties' customers by volume purchase both fixed and variable speed refrigeration compressors;
 - (d) Fixed speed refrigeration compressors compete with variable speed refrigeration compressors because using a variable speed compressor is just one way in which a customer can achieve a desired overall efficiency;
 - (e) From a technical perspective, it is easy to convert a fixed speed refrigeration compressor into a variable speed refrigeration compressor by adding an inverter;
 - (f) The price difference is small and continuing to go down.
- (46) In its Response to the Article 6(1)(c) decision, the Notifying Party did not put into question the Commission's preliminary findings that, household and light commercial refrigeration compressors constitute separate product markets, and that fixed speed and variable speed compressors constitute separate product markets.¹⁸

5.2.2. *The Commission's precedents*

- (47) The most recent decision in which the Commission considered the refrigeration compressors industry dates from 2013, when it approved the acquisition of ACC Austria by Secop. In its decision,¹⁹ the Commission left open the question of whether there were separate markets for hermetic reciprocating compressors installed in household refrigeration appliances ("household refrigeration compressors") and

¹⁴ Form CO, paragraph 17.

¹⁵ Form CO, paragraph 18.

¹⁶ Form CO, paragraph 20.

¹⁷ Notifying Party's submission titled "Compressor efficiency and speed-type" of 4 October 2018.

¹⁸ Notifying Party's Response to the Article 6(1)(c) decision, paragraph 24.

¹⁹ Case M.6996 *Secop/ACC Austria*.

those installed in light commercial refrigeration appliances (“light commercial refrigeration compressors”).

- (48) While the market investigation indicated that different compressor technologies were not substitutable, the Commission did not conclude on this issue.²⁰
- (49) As regards further segmentation of the compressor market, the Commission found in the M.6996 *Secop/ACC Austria* decision that compressors of all sizes used in a wide range of household refrigeration appliances formed part of a single market.²¹ It left open the question of whether there were separate markets for variable speed and fixed speed compressors as the variable speed compressor market was nascent and immaterial at the time.

5.2.3. *The Commission's assessment*

- (50) The Commission conducted its assessment of the product market definition in Phase I. On the basis that the Notifying Party did not challenge the Commission’s preliminary findings in the Article 6(1)(c) decision, the Commission did not conduct any further investigation of the product market in Phase II.

5.2.3.1. Types of refrigeration compressors by technology

- (51) The vast majority of customers responding to the Commission’s market investigation indicated that it was either: (i) not possible to substitute different technology types of refrigeration compressors (linear, rotary, hermetic reciprocating, semi-hermetic etc.)²²; or (ii) that it was possible only for certain applications.²³ Responses did however indicate that some technology types of compressors could be substituted for certain light commercial applications only. Only a very small minority of respondents indicated that it was always possible to substitute different types of compressor regardless of the technology. However, these respondents were active in the light commercial market and it therefore appears likely that these comments referred to the light commercial market.²⁴
- (52) As regards light commercial refrigeration compressors, there was mixed feedback regarding the degree of substitutability between different types of compressors by technology. For example, one respondent said that they were not able to replace hermetic reciprocating compressors with rotary compressors, because “*rotary compressors cannot reach the compression ratio we need for freezer appliances etc.*”²⁵ A few others referred to rotary and scroll compressors being able to replace

²⁰ Case M.6996 *Secop/ACC Austria*, paragraph 20.

²¹ As the ACC Austria plant acquired in this transaction only produced household compressors, the Commission did not examine closely light commercial compressors.

²² **Linear compressors** have a linear motor coupled to resonating mechanical system (piston and spring). The piston is activated by magnets and controlled by a spring mechanism. Linear compressors are energy-efficient and more compact than hermetic reciprocating refrigeration compressors, but have high manufacturing costs. **Rotary compressors** use a roller to compress the refrigerant inside a cylinder by a rotating action. Historically, rotary compressors were used in high-volume air-conditioning applications, and not in refrigeration, due to their lower efficiency levels, inferior reliability, and the higher levels of noise and vibration that they produce. **Semi-hermetic reciprocating compressors** are distinguishable from hermetic reciprocating compressors because the housing for the crankshaft and the motor is not sealed. They are large and heavy, and tend to be used in large refrigerator applications, such as supermarket islands. More information regarding the different compressors technologies is contained at Form CO, paragraph 118.

²³ Replies to Q2 – Questionnaire to customers, q. 6.

²⁴ Replies to Q2 – Questionnaire to customers, q. 6.

²⁵ Reply to Q2 – Questionnaire to customers, q. 6.

hermetic compressors for commercial refrigeration.²⁶ On the other hand, another respondent said that: *"for light commercial refrigeration applications, reciprocating compressor technology is the only practical technology based on performance, energy efficiency, availability and price."*²⁷

- (53) The Commission therefore considers, that the substitution in light commercial refrigeration compressors between hermetic reciprocating and other types of compressor technology appears to be most relevant for the light commercial refrigeration compressors with the higher displacement ranges. Indeed, the Notifying Party itself refers to the use of scroll and rotary compressors as a substitute for hermetic compressors, typically starting at displacement ranges above 28cm³.²⁸ However, only a minority of the Parties' light commercial refrigeration compressors have displacement ranges of 28cm³ or more.²⁹ Consequently, the Commission is of the view that only a minority of hermetic reciprocating compressors for light commercial refrigeration applications are likely to be able to be substitutable with other types of compressor technologies, such as rotary or scroll compressors.

5.2.3.2. Compressors for household and light commercial refrigeration applications

- (54) Customers that responded to the Phase I investigation indicated that there were a number of differences between compressors for household and light commercial refrigeration applications, such as: (i) different temperature limits, cooling power and displacement; (ii) physical size, efficiency rates and types of refrigerant used; (iii) back pressure; and (iv) durability and reliability, as light commercial applications have to be more durable due to heavy use.³⁰
- (55) For example, one light commercial customer noted that: *"Compressors for light commercial applications have different range of operation parameters. The main difference for our applications is that [sic.] they have Medium Low Back pressure or High Back Pressure, compared to the Low back pressure which is the standard for household applications. Another important difference is related with the typical refrigerant, which for Light commercial applications is R290 while for household applications is R600."*³¹
- (56) A household customer made similar observations, noting in particular that the design and components of household and light commercial refrigeration compressors were similar, but not identical: *"Household compressors use different refrigerants than light commercial compressors: R600A for Household compressors in Europe and Asia;.....Light commercial compressors use R134A or R290 (new) mainly. Light commercial compressors tend to have a bigger cooling capacity than household compressors. The design and components are similar but not identical for household and light commercial compressors."*³²
- (57) Respondent competitors identified similar differences, for example one competitor noted that they distinguish between household and light commercial refrigeration

²⁶ Replies to Q2 – Questionnaire to customers, q. 6.

²⁷ Reply to Q2 – Questionnaire to customers, q. 6.

²⁸ Form CO, paragraph 120.

²⁹ Form CO, Tables 4 and 5, Parties' reply to RFI 12.

³⁰ Replies to Q2 – Questionnaire to customers, q. 7 and q. 8.

³¹ Reply to Q2 – Questionnaire to customers, q. 7.

³² Reply to Q2 – Questionnaire to customers, q. 7.

compressors on the basis of: *"mainly by application, refrigerant and cooling capacity."*³³

- (58) Both customers and competitors that responded to the Commission's investigation also confirmed that household refrigeration compressors have lower displacement capacities than light commercial refrigeration compressors.³⁴
- (59) As regards the Notifying Party's arguments that the same refrigeration compressor model can be used for household and light commercial applications, only a very small minority of customers stated that this was possible. Rather, the Commission's market investigation indicated that while there may be some limited overlap, namely that the largest household refrigeration compressors can also be used in some of the smallest light commercial refrigeration applications, the two types of compressors are not substitutable for all types of household and light commercial applications.³⁵
- (60) For example, one customer noted that: *"In general, it is not possible to use the exactly same compressor in household and light commercial applications. Some compressor producers sometimes modify existing compressors normally used in one segment so that they can be used as well in the other application segment. However, even if the compressor family may be same, the compressors which are used in light commercial and household applications are never 100% identical."*³⁶
- (61) Another respondent noted that: *"OEM customers....consider that household appliances need some specific models and it is the same for light commercial appliances. But it is not impossible to find one model normally used in one type of refrigerator mounted in a refrigerator of the other type..."*³⁷
- (62) All but one of the respondent competitors stated that the same refrigeration compressor could only be sold for some, but not all, household and light commercial applications. For example, one competitor noted: *"We could only use a household compressor for very small commercial applications which use the same refrigerant. Commercial applications typically are exposed to variations in application which include temperature excursions and requirements for product to reach a certain temperature that increase the loading on the internal components. This can also include large variations in electrical power and conditions where new product is added to the refrigerated case on a regular basis. An example of this could be the delivery of room temperature carbonated beverage deliveries on a daily basis."*³⁸
- (63) A number of light commercial customers noted that there were certain light commercial applications for which specific light commercial refrigeration compressors were needed (and substitutes of household compressors could not be used) and this accounted for an important share of their purchases. For example, one noted: *"applications that require higher cooling capacities as in large horizontal cabinets (>300 litres), Vertical and Island display cabinets and Scooping cabinets all require light commercial compressors for which the house hold compressors are not suitable. These constitute a fairly large proportion of our requirements."*³⁹

³³ Reply to Q1 – Questionnaire to competitors, q. 10, Replies to Q1 - Questionnaire to competitors, q. 10.

³⁴ Replies to Q2 – Questionnaire to customers, q. 8, Reply to Q1 – Questionnaire to competitors, q. 7.

³⁵ Replies to Q2 – Questionnaire to customers, q. 9.

³⁶ Reply to Q2 – Questionnaire to customers, q. 9.

³⁷ Reply to Q2 – Questionnaire to customers, q. 9.

³⁸ Reply to Q1 – Questionnaire to competitors, q. 12.

³⁹ Reply to Q2 – Questionnaire to customers, q. 10.

- (64) Another customer stated that: "*Industrial and restaurant refrigerators operate under very different conditions than household. Consequently, specific light commercial compressors are needed. Due to the market requirements on the product itself, specific light commercial compressors represent 100% of total demand for compressors for light commercial applications.*"⁴⁰ Another important light commercial customer stated that "*around 80%*" of their light commercial applications required specific light commercial refrigeration compressors.⁴¹
- (65) In addition, respondent customers generally stated that light commercial refrigeration compressors tend to be between 10–50% more expensive than household refrigeration compressors.⁴²
- (66) The Parties, in their own internal strategy documents, also consider their household and light commercial businesses separately, and indeed, they are also managed separately.⁴³ Figure 2 indicates the different business divisions within Nidec's compressor business, including household refrigeration compressors (Cold HH) and light commercial refrigeration compressors (Cold LC). Embraco also segments its household and light commercial refrigeration compressor business in the same way, i.e. into household and light commercial compressors.⁴⁴

Figure 2 [...]

[...]

Source: [...].

- (67) Finally, as regards supply side substitution, the majority of respondent competitors indicated that production on the same line cannot be switched between production of refrigeration compressors for household and light commercial applications immediately and without incurring significant costs.⁴⁵ For example, one competitor producing both household and light commercial refrigeration compressors noted that: "*Product is different even as concept is the same. Then big investments are required. Also household costs and big volumes with few models require more specific automatic lines and lower costs.*"⁴⁶ Another noted that: "*The switch from the production of household refrigeration compressors to the production of brand-new light commercial refrigeration compressors for medium-large volume light commercial applications - which, as mentioned, cannot work with household refrigeration compressors - would entail material time and costs.*"⁴⁷
- (68) Only one competitor stated that it could change over its assembly line quickly (in less than one hour).⁴⁸ Another competitor said that their particular model could be used for both household and light commercial applications, so this did not involve a switch over.⁴⁹

⁴⁰ Reply to Q2 – Questionnaire to customers, q. 10.

⁴¹ Reply to Q2 – Questionnaire to customers, q. 10.

⁴² Replies to Q2 – Questionnaire to customers, q. 11.

⁴³ See for example Form CO, Annex 10(6), slide 2.

⁴⁴ Form CO, Annex 10(3), [...], slide 8.

⁴⁵ Replies to Q1 – Questionnaire to competitors, q. 14.

⁴⁶ Reply to Q1 – Questionnaire to competitors, q. 14.

⁴⁷ Reply to Q1 – Questionnaire to competitors, q. 14.

⁴⁸ Reply to Q1 – Questionnaire to competitors, q. 14.

⁴⁹ Reply to Q1 – Questionnaire to competitors, q. 14.

5.2.3.3. Compressors with fixed speed and variable speed technology

- (69) With regard to fixed speed and variable speed refrigeration compressors, the feedback from the market participants in the Commission's market investigation confirmed that refrigeration compressors with variable speed technology are different from those with fixed speed technology, because a variable speed compressor requires a driver (inverter controller) to run the compressor and a specific electrical motor.⁵⁰
- (70) From a demand-side perspective, the vast majority of customers that responded to the Commission's market investigation stated that fixed and variable speed refrigeration compressors are not substitutable.⁵¹ This was echoed by competitors – the majority of competitors that responded to the Phase I market investigation noted that fixed speed and variable speed refrigeration compressors are not substitutable for their customers.⁵²
- (71) One market participant explained: *"An application requiring variable speed can reach highest energy efficiency, a fixed speed cannot achieve same. Cost for variable speed is higher but its premium."*⁵³ A producer of household refrigeration compressors also noted that: *"From a demand-side perspective, variable speed and single speed household refrigeration compressors are to a large extent not interchangeable. In particular, variable speed compressors can guarantee an efficiency level that single speed compressors usually cannot match – with a very few exceptions...In addition, and most of all, household refrigerators that are engineered to work with a variable speed compressor cannot work also with a single speed compressor, and vice-versa."*⁵⁴
- (72) From a demand-side perspective, customers in general see the main differences between fixed and variable speed refrigeration compressors to be efficiency and price.
- (73) As regards efficiency, customers confirmed that there are differences between compressors, which can be grouped into low, medium and high efficiency products. Feedback from some customers that responded to the Commission's market investigation indicated that while fixed speed technology can be substitutable with variable speed technology in the low-medium energy class, *"on high efficiency (best in class) variable speed is the unique solution"*.⁵⁵ Another customer specified that low efficiency is achieved with fixed speed technology up to 1.4 COP CECOMAF⁵⁶; mid efficiency is achieved with fixed speed technology > 1.4 COP CECOMAF and

⁵⁰ Replies to Q1 – Questionnaire to competitors, q. 18.1 and q. 19.1.

⁵¹ Replies to Q2 – Questionnaire to customers, q. 13.

⁵² Replies to Q1 – Questionnaire to competitors, q. 19.

⁵³ Reply to Q2 – Questionnaire to customers, q. 13.1.

⁵⁴ Reply to Q1 – Questionnaire to competitors, q. 19.1.

⁵⁵ Reply to Q2 – Questionnaire to customers, q. 16.

⁵⁶ COP stands for "coefficient of performance"; CECOMAF stands for "Comité Européen de Constructeurs de Matériel Frigorifique" (the European Committee of Refrigeration Manufacturers) and refers to a standard used by the industry to define the size of the refrigeration capacity of compressors under comparable evaporating and condensing temperatures. The other standard used by the industry to measure the coefficient of performance is ASHRAE, which stands for "The American Society of Heating, Refrigerating and Air-Conditioning Engineers".

variable speed technology up to 1.4 COP CECOMAF; while high efficiency is only achieved with variable speed technology > 1.4 COP CECOMAF.⁵⁷

- (74) Regarding price, the feedback from customers and competitors shows that variable speed refrigeration compressors are more expensive than fixed speed refrigeration compressors.⁵⁸ Some customers indicated that the price difference is in the range of 30–50%, others noted it is even more, between 100–150%.⁵⁹ The price difference seems to be a result of various factors, and in particular the fact that variable speed refrigeration compressors use additional components, such as an inverter, that make it a more expensive technology.
- (75) Competitors also indicated similar ranges in price differences. Some competitors also noted that the prices may vary based on the order volumes too.⁶⁰ Furthermore, one customer noted that the price difference is *"due to the different production quantity and demand. VSD will arrive at a similar level in the next 5-7 years,"*⁶¹ which points to the fact that fixed speed refrigeration compressors are currently sold at a cheaper price than variable speed refrigeration compressors due to the different production quantities and demand for the respective products. This customer also seems to have an expectation that variable speed refrigeration compressors will reach similar levels (it is not clear whether the customer refers to prices or production/demand or both) as fixed speed refrigeration compressors in the next 5–7 years. Thus, given the higher demand, compressor manufacturers are likely to achieve better economies of scale in the production of fixed speed refrigeration compressors. As such, the production volumes are another factor that leads to the significant price difference between refrigeration compressors with fixed and variable speed technology.
- (76) Moreover, some customers indicated that the market structure differs between fixed and variable speed refrigeration compressors, with fixed speed refrigeration compressors being a more mature technology, the market therefore being more competitive while the market for variable speed refrigeration compressors has *"very limited competition"*.⁶² One customer noted: *"Variable speed compressors are more sophisticated in terms of technology and use. Not all compressor manufacturers offer reliable variable speed compressors."*⁶³ Another customer took a similar view: *"Variable speed is a more complex technology, not offered by all compressor manufacturers. There is a significant reliability gap between the best and the worst variable speed technology. Embraco is a leader in this technology."* The same customer also noted that: *"only a few of them [suppliers] can provide high efficiency compressors with reliable performance and quality."*⁶⁴
- (77) Finally, as regards supply side substitution, feedback from competitors that responded to the Commission's market investigation showed that switching between the production of fixed and variable speed on the same production line without incurring significant costs may be difficult and indeed limited. While one competitor indicated that such switching (that is to say switching from fixed speed to variable speed and vice versa) would be possible for both household and light commercial

⁵⁷ Reply to Q2 – Questionnaire to customers, q. 16.

⁵⁸ Replies to Q2 – Questionnaire to customers, q. 14; replies to Q1 - Questionnaire to competitors, q. 20.

⁵⁹ Replies to Q2 – Questionnaire to customers, q. 14.1.

⁶⁰ Replies to Q1 – Questionnaire to competitors, q. 20.

⁶¹ Reply to Q2 – Questionnaire to customers, q. 14.

⁶² Replies to Q2 – Questionnaire to customers, q. 15.

⁶³ Reply to Q2 – Questionnaire to customers, q. 15.

⁶⁴ Reply to Q2 – Questionnaire to customers, q. 15 and q. 16.

refrigeration compressors, for some competitors this would be possible only with regard to household refrigeration compressors, for others only for light commercial refrigeration compressors, and for certain competitors this is not possible at all.⁶⁵ Some competitors understood this question to refer to the possibility of new entry or switching production to develop variable speed refrigeration compressors. One competitor replied that switching between fixed and variable speed refrigeration compressors would not be possible for those players that have not yet developed their own refrigeration compressor with a variable speed technology.⁶⁶

5.2.4. Conclusion

(78) For the reasons set out in recitals (51) to (77), the Commission considers that, for the purposes of assessing the Transaction:

- (a) hermetic reciprocating refrigeration compressors constitute a separate product market from refrigeration compressors based on other technologies;
- (b) household and light commercial refrigeration compressors constitute separate product markets; and
- (c) fixed speed and variable speed refrigeration compressors constitute separate product markets for each of household and light commercial refrigeration compressors.

(79) In the rest of this Decision, the assessment is conducted in relation to hermetic reciprocating refrigeration compressors, and not based on other technologies, given that the Parties principally produce this type of compressors and there are no affected markets with regard to other compressor technologies.

5.3. Relevant geographic market definition

5.3.1. The Commission's framework for assessment

(80) The relevant geographic market comprises the area in which the undertakings concerned are involved in the supply and demand of products or services, in which the conditions of competition are sufficiently homogeneous and which can be distinguished from neighbouring areas because the conditions of competition are appreciably different in those areas.⁶⁷

(81) In order to identify the relevant geographic area, the Commission takes a preliminary view of its scope based, *inter alia*, on broad indications as to the distribution of market shares between the parties and their competitors.⁶⁸

(82) This initial working hypothesis is checked against an analysis of demand characteristics (importance of national or local preferences, current patterns of purchases of customers, product differentiation/brands, other) in order to establish whether companies in different areas do indeed constitute a real alternative source of supply for consumers.⁶⁹

⁶⁵ Replies to Q1 – Questionnaire to competitors, q. 18.

⁶⁶ Reply to Q1 – Questionnaire to competitors, q. 18.1.

⁶⁷ Commission Notice on the definition of relevant market for the purpose of Community competition law, OJ C 372, 9.12.1997, p. 5–13, paragraph 8.

⁶⁸ Commission Notice on the definition of relevant market for the purpose of Community competition law, OJ C 372, 9.12.1997, p. 5–13, paragraph 28.

⁶⁹ Commission Notice on the definition of relevant market for the purpose of Community competition law, OJ C 372, 9.12.1997, p. 5–13, paragraph 29.

- (83) From a supply perspective, the Commission further identifies possible obstacles and barriers isolating companies located in a given area from the competitive pressure of companies located outside that area, so as to determine the precise degree of market interpenetration at national, European or global level. This analysis includes the examination, *inter alia*, of tariffs limiting trade or production, technical standards, requirements for administrative authorisations or packaging regulations.⁷⁰
- (84) The Commission also assesses actual patterns and evolution of trade flows to ascertain the importance of each demand or supply factor and the extent to which they may or may not constitute actual barriers creating different geographic markets. This analysis will generally address the question of transport costs and the extent to which these may hinder trade between different areas, having regard to plant location, costs of production and relative price levels.⁷¹

5.3.2. *The Commission's precedents*

- (85) In the M.6996 *Secop/ACC Austria* decision, the Commission considered that the market for hermetic reciprocating compressors was at least EEA-wide in scope, but left open the precise geographic market definition.⁷² In that case, the notifying party claimed that the geographic market definition could be: (i) worldwide; (ii) region-wide (that is to say, a geographic region comprising the EEA, Belarus, Ukraine, Russia, Serbia, Switzerland, and Turkey); or (iii) EEA-wide.⁷³

5.3.3. *Fixed speed household refrigeration compressors*

5.3.3.1. The Notifying Party's arguments

- (86) The Notifying Party argued that the compressor market is worldwide in scope and, consequently, that Union suppliers are subject to competitive pressure from suppliers that are located outside the Union.⁷⁴ In this regard, the Notifying Party noted that in M.6996 *Secop/ACC Austria*⁷⁵ a majority of respondents to the market investigation had indicated that they sourced hermetic reciprocating refrigeration compressors on a worldwide level for production plants located in the EEA.⁷⁶
- (87) The Notifying Party argued that compressors are easy and cheap to transport, with transport costs amounting to [0-5]% of the product price.⁷⁷ The Notifying Party also argued that there are no significant barriers to trade: tariffs on imports into the Union would be low or non-existent and technical standards would not restrict global trade.⁷⁸

5.3.3.2. The Commission's assessment

- (88) As explained in recitals (102) to (104), the difference in levels of import tariffs between countries are an indication that the conditions of competition are not homogeneous around the globe.

⁷⁰ Commission Notice on the definition of relevant market for the purpose of Community competition law, OJ C 372, 9.12.1997, p. 5–13, paragraph 30.

⁷¹ Commission Notice on the definition of relevant market for the purpose of Community competition law, OJ C 372, 9.12.1997, p. 5–13, paragraph 31.

⁷² Case M.6996 *Secop/ACC Austria*, paragraph 28.

⁷³ Case M.6996 *Secop/ACC Austria*, paragraph 26.

⁷⁴ Form CO, paragraph 217.

⁷⁵ Case M.6996 *Secop/ACC Austria*, paragraph 27.

⁷⁶ Form CO, paragraph 217.

⁷⁷ Form CO, paragraph 221.

⁷⁸ Form CO, paragraph 221.

- (89) Moreover, as explained in recitals (105) to (112), the different regulatory requirements and differences in customers' demand as regards energy efficiency of compressors across different regions in the world show that the conditions of competition are not homogenous worldwide.
- (90) However, given that the Transaction does not raise competition concerns regardless of the exact geographic scope of the market for fixed speed household refrigeration compressors, the delineation of the geographic scope of fixed speed household refrigeration compressors was not a focus of the Commission's Phase II investigation.

5.3.3.3. Conclusion

- (91) For the purpose of assessing the present Transaction, the issue of whether the relevant geographic market for fixed speed household refrigeration compressors should be considered as EEA-wide or worldwide in scope can be left open because the Transaction does not give rise to a significant impediment to effective competition under either geographic market definition.

5.3.4. *Variable speed household refrigeration compressors*

5.3.4.1. The Notifying Party's arguments

- (92) The Notifying Party argued that the variable speed household refrigeration compressor market is worldwide in scope and, consequently, that Union suppliers are subject to competitive pressure from suppliers that are located outside the Union.⁷⁹
- (93) The Notifying Party maintained that suppliers of variable speed household refrigeration compressors do not require production facilities within the EEA in order to compete effectively for EEA volumes.⁸⁰
- (94) In this regard, the Notifying Party argued that transport costs are low or non-existent and that, as a result, suppliers are able to produce variable speed household refrigeration compressors where costs are the lowest and ship their products wherever they are needed.⁸¹ The Notifying Party also argued that there are no significant barriers to trade: tariffs on imports to the Union would be low or non-existent and technical standards would not restrict global trade.⁸²
- (95) To support this claim, the Notifying Party maintained that certain information on recent trade flows, import statistics and destinations of supplies would confirm that customers source household refrigeration compressors on a worldwide level for production plants located in the EEA.⁸³ The Notifying Party stated that 71% of sales of all household refrigeration compressors in the EEA were imported and 44% of production within the EEA was exported.⁸⁴ [...].⁸⁵

⁷⁹ Form CO, paragraph 217.

⁸⁰ Notifying Party's submission titled "Nidec/Embraco, Economic Analysis of the Variable Speed Household Segment" of 18 January 2019, page 6.

⁸¹ Notifying Party's submission titled "Nidec/Embraco, Economic Analysis of the Variable Speed Household Segment" of 18 January 2019, page 6.

⁸² Form CO, paragraph 221.

⁸³ Notifying Party's Response to the Article 6(1)(c) decision, paragraph 34.

⁸⁴ Notifying Party's Response to the Article 6(1)(c) decision, paragraph 35.

⁸⁵ Notifying Party's Response to the Article 6(1)(c) decision, paragraph 37. [...].

- (96) Furthermore, the Notifying Party argued that a number of important customers – [...] – choose their suppliers and negotiate prices largely on a centralised global basis.⁸⁶ In this regard, the Notifying Party referred to a quote in the Article 6(1)(c) decision from one of these customers indicating that the compressor market is global with “*no limitations in the field of household*” when it comes to buying compressors from suppliers located outside the EEA.⁸⁷ Similarly, the Notifying Party noted that in M.6996 *Secop/ACC Austria* a majority of respondents to the market investigation had indicated that they sourced hermetic reciprocating refrigeration compressors on a worldwide level for production plants located in the EEA.⁸⁸
- (97) In this case, the Notifying Party remarked that respondents in the Commission’s Phase I market investigation largely supported the conclusion that the variable speed household refrigeration compressor market is global in scope.⁸⁹ The Notifying Party argued that, in the Article 6(1)(c) decision, the Commission based its preliminary conclusion in relation to variable speed household refrigeration compressors on a single quote from just one customer.⁹⁰ In the view of the Notifying Party, this quote would show that EEA and Chinese standards are similar and belong to the same geographic market. It would moreover indicate that most suppliers are able to provide products for the EEA standard, making standards irrelevant in the context of geographic market definition.⁹¹ Lastly, the Notifying Party submitted that refrigerators sold in the EEA, which are compliant with the efficiency regulation, can be produced outside the EEA.⁹²

5.3.4.2. The Commission’s assessment

- (98) The evidence collected during the Commission’s market investigation indicates that some large international customers of household refrigeration compressors conclude procurement contracts on a global level⁹³ and that transport costs are low.⁹⁴ However, these elements in and of themselves do not warrant a conclusion that the geographic market for variable speed household refrigeration compressors would be worldwide in scope. On the contrary, the Commission’s market investigation points to elements suggesting that the conditions of competition are not homogeneous across regions of the world.

⁸⁶ Notifying Party’s submission titled “Nidec/Embraco, Economic Analysis of the Variable Speed Household Segment” of 18 January 2019, page 5.

⁸⁷ Notifying Party’s Response to the Article 6(1)(c) decision, paragraph 31.

⁸⁸ Case M.6996 *Secop/ACC Austria*, paragraph 27; Notifying Party’s Response to the Article 6(1)(c) decision, paragraph 27.

⁸⁹ Notifying Party’s Response to the Article 6(1)(c) decision, paragraph 28.

⁹⁰ Notifying Party’s Response to the Article 6(1)(c) decision, paragraph 30. The quote states the following: “[t]he EEA standard is similar to China (same voltage, same frequency, same gas refrigerant). In the other regions the technical standards are different (R134a refrigerant, voltage 155V – 127V, 60Hz). Most of the suppliers can provide products for EEA standardAs the legislation for efficient energy use in the EEA is much more stringent than in other regions the need for variable speed technology compressors is higher. Therefore, securing a competitive, EEA production of these products, combined with an open import regulation for the variable speed compressors, is needed to secure a competitive manufacturing of refrigerators and freezers”.

⁹¹ Notifying Party’s Response to the Article 6(1)(c) decision, paragraph 31.

⁹² Notifying Party’s Response to the Article 6(1)(c) decision, paragraph 31.

⁹³ Replies to Q2 – Questionnaire to customers, q. 19.

⁹⁴ Replies to Q2 – Questionnaire to customers, q. 20.

a. Merchant market share variations between the EEA and worldwide level

- (99) The market reconstruction carried out during the Phase II investigation indicates that the Parties' combined market share in the merchant market for variable speed household refrigeration compressors was approximately [90-100]% by value at the EEA level in 2018. This has been confirmed by the Notifying Party's own figures, which show that combined market shares amounted to [90-100]% by volume and [90-100]% by value at the EEA level in 2018. On the basis of estimates provided by the Parties, their combined market share at the worldwide level was [30-40]% by volume and [30-40]% by value in 2018.⁹⁵
- (100) In addition to the Parties, only one additional supplier, namely Wanbao/ACC, has more than negligible sales of variable speed household refrigeration compressors to customers in the EEA.⁹⁶ At the same time, there are a greater number of suppliers active at the worldwide level, including competitors such as Donper, Jiaxipera, Panasonic and Tee, which currently do not supply variable speed household refrigeration compressors to customers in the EEA.
- (101) The sharp variation in market shares between the EEA and worldwide level and the fact that many of the worldwide suppliers are currently not present in the EEA are first indications that the conditions of competition are not homogeneous worldwide in the market for variable speed household refrigeration compressors.

b. Differences in applicable import tariffs

- (102) Based on information provided by the Notifying Party,⁹⁷ while the EEA has relatively low import tariffs for household refrigeration compressors, namely 2.2%,⁹⁸ China imposes import tariffs of 8%, Thailand 10%, Pakistan 11%, India 10%, South Korea 8%,⁹⁹ Brazil 18%, Chile 6%, Egypt 30% and the United States of America 25% on imports from China.¹⁰⁰
- (103) Hence, certain regions such as China, India and Brazil appear to be tariff-protected to some extent, with the result that local suppliers appear to have a considerable competitive advantage. Some market participants have echoed this same view. For example, an important customer of household refrigeration compressors put this view forward with respect to Brazil.¹⁰¹
- (104) The difference in levels of import tariffs are another indication that conditions of competition are not homogeneous around the world.

c. Differences in the regulatory environment

- (105) The EEA is regarded as imposing particularly strict regulatory requirements in terms of energy efficiency. The evidence gathered by the Commission in its investigation shows that, while there is a global trend towards standardisation of various regulations relating to energy efficiency, there are currently no uniform norms or binding regulations that would apply across the world.

⁹⁵ Reply to RFI 22, "2018 actual market shares - Update", rows 180 and 527.

⁹⁶ In particular, [0-5]% in value and [5-10]% in volume in 2017 (Customer reply to RFI of 10.08.2018, pages 4 and 5).

⁹⁷ Reply to RFI 20, q. 1.

⁹⁸ 0% tariffs on imports into the EEA from Turkey and Mexico.

⁹⁹ 0% tariffs on imports into South Korea from China, EU, India and Singapore.

¹⁰⁰ These figures serve as a general rule, whilst there are occasional exceptions, such as 0% on compressors from Mercosur to Brazil.

¹⁰¹ Minutes of a conference call with a customer, 30.08.2018, paragraph 23.

- (106) Conversely, regions (for example the EU) and countries (for example the US or China) adopt their own regulations, which might not come into effect at the same time. This leads compressor manufacturers to monitor the various regulatory requirements and developments, such as upcoming regulations, separately for different regions and countries. For instance, [...].¹⁰²

Figure 3 – [...]

[...]

Source: [...].

- (107) Contrary to the Notifying Party’s indication that no major technical standards affect global trade,¹⁰³ the impact of certain regulations appears to directly influence the types of compressors sold in a given region. For example, certain refrigeration compressors sold in the US would no longer be compliant with the current Union regulations. In this context, [...].¹⁰⁴
- (108) In this regard, a number of customers have indicated that the demand for variable speed household refrigeration compressors in different regions varies according to parameters such as environmental standards and energy efficiency. For example, a customer argued that “[t]he demand of variable speed varies globally mainly due to the environmental standards such as gas refrigerant (R134a-R600a), product safety certification (VDE, UL..) and technical specification requirements mainly efficiency, voltage (230V, 115V, 127V)”.¹⁰⁵ This same customer also emphasised the importance of there being different types of refrigerants and voltage differences across regions, further specifying that in “North America and Latin America the refrigerant is mainly R134a and 60Hz frequency. Voltage is 115V for NA and 127V for Brazil. The demand for high COP is moving up North America while for Brazil is still low-mid. UL certification is required in North America”.¹⁰⁶
- (109) Another customer noted that: “[f]or EEA countries, high efficient compressors will be used more because of new energy regulation in Europe. Compressors should have VDE or TUV certification to be used in EEA region. For the US, compressors should have UL approval. Since product sizes are larger in Europe [sic], we may need to use higher cooling capacity there. For some countries in APA region like Pakistan, India, compressors should be adapted for low voltage startability”.¹⁰⁷
- (110) Yet another customer stated that: “many countries ha[ve] different regulations and standards. In order to comply with these standards, we can use different variable speed compressors”.¹⁰⁸
- (111) Furthermore, internal documents from the Parties reflect a differentiation in household refrigeration compressors needs according to the particularities of each region. For instance, [...].

¹⁰² Embraco’s internal document, presentation titled [...], not dated, Doc ID 1533-24756 (EMB-EC-00023159.pptx), slide 17.

¹⁰³ Form CO, paragraph 221.

¹⁰⁴ See, for instance, Embraco’s internal document, [...], not dated, Doc ID 1533-24756 (EMB-EC-00023159.pptx), slide 17, [...].

¹⁰⁵ Reply to Phase II questionnaire to customers, q. 2.

¹⁰⁶ Reply to Phase II questionnaire to customers, q. 2.

¹⁰⁷ Reply to Phase II questionnaire to customers, q. 2.

¹⁰⁸ Reply to Phase II questionnaire to customers, q. 2.

Figure 4 – [...]

[...]

Source: [...].

Figure 5 – [...]

[...]

Source: [...].

- (112) In the Commission's view, the different regulatory requirements and differences in customers' demand as regards energy efficiency of refrigeration compressors across different regions in the world show that the conditions of competition are not homogenous worldwide. The Commission acknowledges that manufacturers based outside the EEA are capable of producing variable speed household refrigeration compressors that satisfy regulatory requirements applicable within the EEA and the particular demands of customers located in the EEA. However, as such this does not speak against the finding that the relevant geographic scope of the market for variable speed household refrigeration compressors is EEA-wide or at least a clearly differentiated EEA region in a possible worldwide market.

5.3.4.3. Conclusion

- (113) The Commission considers that, for the purpose of assessing the present Transaction, the market for variable speed household refrigeration compressors is EEA-wide in geographic scope or, at least worldwide, with strong regional differentiations, where the EEA has to be considered as a region highly differentiated from others.

5.3.5. *Fixed and variable speed light commercial refrigeration compressors*

5.3.5.1. The Notifying Party's arguments

- (114) In the Form CO, the Notifying Party argued that there are no material differences between compressors manufactured in different regions, nor in the regulation of compressors. Further, it argued that the fact that 80% of the light commercial refrigeration compressors sold in the EEA are manufactured in the EEA is "*simply a function of historic plant and line location*".¹⁰⁹
- (115) The Notifying Party also argued that a large local sales and support presence is not required and that the cost of establishing one, if it were required, are low.¹¹⁰
- (116) Lastly, the Notifying Party argued that the Parties' EEA light commercial customers are testing or sourcing from Chinese competitors and that the Chinese rivals claim in their statements and reports that the light commercial market (including outside China) is a priority.¹¹¹
- (117) In its Response to the Article 6(1)(c) decision, the Notifying Party did not put into question the Commission's preliminary assessment regarding the geographic market definition of fixed and variable speed light commercial refrigeration compressors.¹¹²

¹⁰⁹ Notifying Party's submission titled "Geographic scope of Light Commercial Segment" of 4 October 2018.

¹¹⁰ Notifying Party's submission titled "Geographic scope of Light Commercial Segment" of 4 October 2018.

¹¹¹ Notifying Party's submission titled "Geographic scope of Light Commercial Segment" of 4 October 2018.

¹¹² Notifying Party's Response to the Article 6(1)(c) decision, paragraph 8.

5.3.5.2. The Commission's assessment

- (118) The majority of customers in the Commission's market investigation indicated there are limitations to successfully buying from non-EEA suppliers, in particular for light commercial refrigeration compressors.¹¹³ In this regard, one customer indicated that: *"For light commercial applications you need to be very flexible, this can create problems with the long supply chain from China. No limitation in the field of household."*¹¹⁴ Another customer noted, as regards the supply of light commercial refrigeration compressors: *"The purchasing lead time required is less than 6 weeks. The transport time elapse from extra EEA, added with the production lead time is too long and often uncompliant whit our need. We can accept Lead time longer than 5 week only when we have long term forecast from our customers, usually not available."*¹¹⁵
- (119) Another customer indicated that: *"Delivery costs and environmental requirements are the major factors which limit us in cooperating with suppliers outside EEA. Many times such suppliers are not able to provide us with certifications proving the goods are following certain standards. Also delivery time is a huge disadvantage."*¹¹⁶
- (120) Certain light commercial customers also indicated that the location of R&D centres or engineers was important. For example, one light commercial customer noted: *"For the cooperation of the R&D it's more convenient it [sic.] the distance is not too big."*¹¹⁷ Other customers mentioned knowledge sharing, technical support and (co-)developing of new products as reasons for why the location of R&D centres and engineers was important for them.¹¹⁸
- (121) Almost half of the customers responding to the market investigation in Phase I also indicated that the location of a supplier's plant mattered also for reasons other than transport costs. These reasons included factors such as: lead times, import tariffs, inventory costs, currency, and raw material costs.¹¹⁹
- (122) The majority of competitors also indicated that the production plant location was important for customers. In this regard, one competitor noted: *"For light commercial refrigeration it has an impact mainly because the market is made of small and medium OEM. More than the transportation cost is the logistic cost as customers want quick deliveries and small quantities. This is only possible being close to customers."*¹²⁰ Another competitor mentioned that proximity was important for R&D, amongst other reasons: *"Proximity with major customers is relevant for R&D, testing activities and delivery times."*¹²¹
- (123) As regards sales personnel, just under half of the customers responding to the Phase I market investigation indicated that a supplier would need sales personnel, or other assets, in the EEA in order to successfully serve their company in the EEA. For example, one light commercial customer noted that: *"Management of forecast needs, change of mix, management of buffer stock, market trend and other request of our*

¹¹³ Replies to Q2 – Questionnaire to customers, q. 24.

¹¹⁴ Reply to Q2 – Questionnaire to customers, q. 24.

¹¹⁵ Reply to Q2 – Questionnaire to customers, q. 24.

¹¹⁶ Reply to Q2 – Questionnaire to customers, q. 24.

¹¹⁷ Reply to Q2 – Questionnaire to customers, q. 22.

¹¹⁸ Replies to Q2 – Questionnaire to customers, q. 22.

¹¹⁹ Replies to Q2 – Questionnaire to customers, q. 21.

¹²⁰ Reply to Q1 – Questionnaire to competitors, q. 28.

¹²¹ Reply to Q1 – Questionnaire to competitors, q. 28.

*group require a strong relationship that can be realized only with a local sales referent quickly available. Also a knowledge of EEA legal requirement (Legal, Fiscal, Tax.) can be better managed when the supplier is located in EU and respect the same legal requirement (UE Certification, European Community LAW an so on)."*¹²²

- (124) However, a majority of competitors indicated that sales personnel, or other assets, in the EEA were needed in order to successfully serve EEA customers.¹²³ For example, one competitor stated that: *"You need local sales team and technical team to support customers as well as the possibility of testing compressors and appliances."*¹²⁴
- (125) Moreover, as regards specifically the market for fixed speed light commercial refrigeration compressors, the figures provided by the Notifying Party show that the Parties held a combined market share of [70-80]% by volume and [70-80]% by value at the EEA level in 2018 and of [40-50]% by volume and [50-60]% by value at the worldwide level in 2018.¹²⁵ The sharp variation in market shares between the EEA and worldwide level are also indications that the conditions of competition are not homogeneous worldwide in the markets for fixed and variable speed light commercial refrigeration compressors.

5.3.5.3. Conclusion

- (126) Based on the above, the Commission considers that, for the purpose of assessing the present Transaction, the markets for fixed and variable speed light commercial refrigeration compressors are EEA-wide in geographic scope or, at least worldwide, with strong regional differentiations, where the EEA has to be considered as a region highly differentiated from others.

5.3.6. Overall conclusion on geographic market definition

- (127) For the reasons set out at recitals (88) - (126), the Commission considers that, for the purpose of assessing the present Transaction:
- (a) It can be left open whether the market for fixed speed household refrigeration compressors is EEA-wide or worldwide in scope because the Transaction does not give rise to a significant impediment to effective competition under either geographic market definition;
 - (b) The market for variable speed household refrigeration compressors is EEA-wide in geographic scope or, at least worldwide, with strong regional differentiations, where the EEA has to be considered as a region highly differentiated from others. The exact geographic market definition can however be left open because the Transaction gives rise to a significant impediment to effective competition under both geographic market definitions.
 - (c) The markets for fixed and variable speed light commercial refrigeration compressors are EEA-wide in geographic scope or, at least worldwide, with strong regional differentiations, where the EEA has to be considered as a region highly differentiated from others. The exact geographic market definition can however be left open because the Transaction gives rise to a

¹²² Reply to Q2 – Questionnaire to customers, q. 23.

¹²³ Replies to Q1 – Questionnaire to competitors, q. 30.

¹²⁴ Reply to Q1 – Questionnaire to competitors, q. 30.

¹²⁵ Reply to RFI 22, “2018 actual market shares - Update”, rows 194 and 555.

significant impediment to effective competition under both geographic market definitions.

- (128) The competitive assessment in section 6 will be conducted at both the EEA and worldwide level.

6. COMPETITIVE ASSESSMENT OF FIXED AND VARIABLE SPEED HOUSEHOLD REFRIGERATION COMPRESSORS, AND FIXED AND VARIABLE SPEED LIGHT COMMERCIAL REFRIGERATION COMPRESSORS

6.1. Introduction to the competitive assessment

- (129) As set out in section 5.2, the Commission considers for the purposes of assessing the Transaction that: (i) household and light commercial refrigeration compressors constitute separate product markets; and (ii) fixed speed and variable speed refrigeration compressors constitute separate product markets for each of household and light commercial refrigeration compressors.

- (130) The competitive assessment in this section 6 is structured as follows:

- (a) An overview of the refrigeration compressors industry and market share methodology is presented in section 6.2;
- (b) The competitive assessment of fixed speed household refrigeration compressors is presented in section 6.3;
- (c) The competitive assessment of variable speed household refrigeration compressors is presented in section 6.4;
- (d) The competitive assessment of fixed and variable speed light commercial refrigeration compressors is presented in section 6.5.

6.1.1. Framework for the competitive assessment

- (131) Under Article 2(2) and (3) of the Merger Regulation, the Commission must assess whether a proposed concentration would significantly impede effective competition in the internal market or in a substantial part of it, in particular through the creation or strengthening of a dominant position.

- (132) In this respect, a merger may entail horizontal and/or non-horizontal effects. Non-horizontal effects are those deriving from a concentration where the undertakings concerned are active in different relevant markets.

- (133) As regards the assessment of horizontal overlaps, the Commission guidelines on the assessment of horizontal mergers under the Horizontal Merger Guidelines¹²⁶ distinguish between two main ways in which mergers between actual or potential competitors on the same relevant market may significantly impede effective competition, namely non-coordinated and coordinated effects.

- (134) According to the Horizontal Merger Guidelines, generally, a merger would significantly impede effective competition if it creates or strengthens the dominant position of a single firm. In some markets, non-coordinated effects may also

¹²⁶ Guidelines on the assessment of horizontal mergers under the Council Regulation on the control of concentrations between undertakings, OJ C 31, 05.02.2004, p. 5-18.

significantly impede effective competition by eliminating important competitive constraints that the merging parties previously exerted upon each other.¹²⁷

6.2. Overview of the refrigeration compressor industry and market share methodology

- (135) As explained in section 5.1, the industry for household refrigeration compressors is characterised by a number of producers of fixed speed compressors, variable speed compressors, or both. There are producers with a long-standing history of producing refrigeration compressors, such as Embraco and Secop (previously owned by Danfoss, now Nidec). Some other manufacturers have been more recent entrants, such as GMCC. In addition, some players, such as LG, Panasonic and Samsung, are vertically integrated players that use most of their production internally for their captive production of refrigeration appliances.
- (136) In addition to the Parties, three other players have production facilities in the EEA: Changhong (in Spain), Tecumseh (in France), and Wanbao/ACC (in Italy). Tecumseh is active predominantly in the production of refrigeration compressors for light commercial applications and only has a limited production of compressors for household applications.
- (137) The Commission considers that to assess the potential impact of the Transaction and the merged entity's market power post-Transaction, the most relevant metrics are the market shares on the merchant market. That is, market shares based on sales on the merchant market, excluding the internal sales of vertically integrated manufacturers that produce compressors predominantly for use in their own appliances, such as Samsung, LG and Panasonic. Those volumes do not impose a direct competitive constraint on the other compressor manufacturers on the merchant market, as vertically integrated suppliers sell very limited volumes on the merchant market, in particular in the EEA.
- (138) Besides, feedback from the Commission's market investigation shows the following. First, a sizeable part of the refrigeration compressors produced by vertically integrated manufacturers is installed on appliances destined to other markets outside of the EEA.¹²⁸ Second, many European customers on the merchant market would be unwilling to purchase compressors from vertically integrated players whom they meet as competitors in the downstream appliance markets (see also recitals (231)-(238)). This feedback, in turn, suggests that also other forms of competitive constraint exerted by vertically integrated manufacturers on the refrigeration compressors' merchant market are limited. Specifically, their potential competitive constraint, coming from the possibility to divert internal sales to the merchant market, and their indirect competitive constraint, coming from the competitive pressure exercised on non-integrated appliance manufacturers – customers of the non-integrated refrigeration compressors manufacturers – in the downstream appliance market, appears to be, if at all present, weak. This further supports the suitability of market shares based on merchant market sales as the relevant metric to assess the merged entity's market power post-Transaction.

¹²⁷ Horizontal Merger Guidelines, paragraph 25.

¹²⁸ The Notifying Party estimates that the combined internal sales of vertically integrated manufacturers represent only ~15% of the total sales (internal and on the merchant market) in the EEA in 2018. See Reply to RFI 22.

- (139) The Commission further considers it appropriate to include in the calculation of the market shares Embraco's sales to Whirlpool, its current parent company. This is because those sales will become external merchant market sales post-Transaction, increasing the merchant market sales of the merged entity. Furthermore, it appears likely that the supply of those volumes would not materially change post-Transaction, this is because: (i) [...]; (ii) [...]; and (iii) [...].¹²⁹ Moreover, these volumes will be contestable post-Transaction once any existing supply agreements expire.
- (140) Furthermore, the Commission considers that in order to assess the potential impact of the Transaction, the value shares are more informative than volume shares. Value shares better represent the competitive positions of the merged entity and its competitors in markets with mostly differentiated products, where the volume of products sold may not be indicative of market power because of significant price differences between products in the same market.
- (141) Thus, value shares represent the market positions of each player measured in terms of value of the sales, rather than volume of the sales. A sizeable difference between value shares and volume shares is an indication of the differentiated nature of the products concerned, as market participants sell their products at different price levels. A higher price can be interpreted as indicating that a given manufacturer is able to offer either better quality and service, or more technologically advanced products, or also that it enjoys a high reputation/brand awareness within the industry. As can be seen from the market shares presented in this Decision, the Parties' value shares are generally higher than their volume shares.
- (142) The Notifying Party provided its own estimates in relation to the market shares,¹³⁰ which form the main basis for the Commission's assessment of the structure of the affected markets.
- (143) The Commission also carried out a market reconstruction in Phase II focussed on household refrigeration compressors based on procurement data from customers. The motivation for the market reconstruction based on customers' procurement data was two-fold: (i) the difficulty of the Notifying Party to provide disaggregated market shares figures for fixed speed and variable speed household compressors during the Phase I investigation; and (ii) the incomplete data set obtained during the Phase I market reconstruction where the Commission requested sales data from competitors of the Parties. Moreover, the Notifying Party in its Response to the Article 6(1)(c) decision also encouraged the Commission to request data from customers of variable speed household refrigeration compressors in order to overcome the difficulty in obtaining data from certain non-EEA based competitors.¹³¹
- (144) The Commission did not contact and did not request procurement data from customers of light commercial refrigeration compressors, as the data obtained during the Phase I investigation was deemed sufficient for the purpose of the Commission's investigation of the markets for fixed and variable speed light commercial refrigeration compressors. In addition, in its Response to the Article 6(1)(c) decision, the Notifying Party did not challenge the Commission's assessment establishing serious doubts in both fixed and variable speed light commercial refrigeration

¹²⁹ See Form CO, paragraphs 101-102.

¹³⁰ Reply to RFI 22.

¹³¹ Notifying Party's Response to the Article 6(1)(c) decision, paragraphs 16-19.

compressors, in the EEA and globally. As such, further data on fixed and variable speed light commercial refrigeration compressors was not considered necessary.

- (145) For a given year, the data requested from customers of household refrigeration compressors in the Phase II market reconstruction included: (i) the number of compressors purchased; (ii) their price; (iii) the type of compressors purchased distinguishing between variable speed and fixed speed; (iv) an indication of their level of efficiency; and (v) an indication of whether the compressors were used as an input for appliances sold in or destined to the EEA, the US or the rest of the world.¹³²
- (146) The requested data covered the period from 2016 to 2020. Customers provided actual purchases for the period 2016–2018, as well as projected purchases for the period 2019–2020.
- (147) For 2018, the market reconstruction covered purchases of approximately 13 million household compressors in the EEA (both fixed and variable speed), amounting to an overall value of approximately EUR 300 million. Worldwide, the market reconstruction covered purchases of approximately 42 million compressors, amounting to an overall value of approximately EUR 925 million.
- (148) Based on the total market volume of household refrigeration compressors sold worldwide and within the EEA as estimated by the Notifying Party,¹³³ the market reconstruction has a coverage of virtually 100% of the sales in the EEA, and 30% of the sales worldwide.

6.3. Competitive assessment of fixed speed household refrigeration compressors

6.3.1. The Notifying Party's arguments

- (149) The Notifying Party submitted that the Transaction does not give rise to competition concerns in fixed speed household refrigeration compressors.
- (150) First, the Notifying Party argued that the Parties' combined market share in fixed speed household refrigeration compressors is low at both the EEA and the worldwide level. In the EEA, the Parties estimated their combined 2018 share of fixed speed household refrigeration compressors to be [30-40]% by volume and [30-40]% by value.¹³⁴ At the global level, the Parties estimated their combined 2018 share of fixed speed household refrigeration compressors to be [10-20]% by volume and [10-20]% by value.¹³⁵
- (151) Second, the Notifying Party pointed out that imports of fixed speed household refrigeration compressors into the EEA exert a significant competitive constraint on the Parties.¹³⁶ In this regard, the Notifying Party submitted trade data reflecting that [70-80]% of all household refrigeration compressors, which are sold in the EEA are imported from outside the EEA.¹³⁷ The Notifying Party also submitted that there has been a significant entry and expansion by the Chinese manufacturers, at the expense of other market players, including the Parties.¹³⁸ As a result, the Notifying Party

¹³² A few customers could not identify precisely the destination of the appliances that used the compressors, and have provided estimates.

¹³³ See Reply to RFI 22.

¹³⁴ Parties' reply to RFI 22.

¹³⁵ Parties' reply to RFI 22.

¹³⁶ Form CO, paragraph 523.

¹³⁷ Form CO, table 28.

¹³⁸ Form CO, paragraph 441.

argued that the prices of fixed speed household refrigeration compressors have decreased significantly over the past five years at both the EEA and worldwide level and are expected to continue decreasing in the coming years.¹³⁹

6.3.2. *The Commission's assessment*

6.3.2.1. Market shares

(152) Table 1 and Table 2 illustrate market shares of the Parties of fixed speed household refrigeration compressors in the EEA and worldwide, respectively. The figures are based on the Notifying Party's estimates. The Commission notes that the Transaction would not give rise to affected markets at the worldwide level in fixed speed household refrigeration compressors.

Table 1: EEA market shares for fixed speed household refrigeration compressors, 2018.¹⁴⁰

Company	Volume share	Value share
Nidec	[10-20]%	[10-20]%
Embraco	[20-30]%	[20-30]%
<i>Combined</i>	<i>[30-40]%</i>	<i>[30-40]%</i>
Market Size (in '000 units and USD '000)	10,597	262,604

Source: Notifying Party's estimates – Reply to RFI 22.

Table 2: WW market shares for fixed speed household refrigeration compressors, 2018.¹⁴¹

Company	Volume share	Value share
Nidec	[0-5]%	[0-5]%
Embraco	[10-20]%	[10-20]%
<i>Combined</i>	<i>[10-20]%</i>	<i>[10-20]%</i>
Market Size (in '000 units and USD '000)	123,037	3,111,345

Source: Notifying Party's estimates – Reply to RFI 22.

(153) Table 3 shows the market shares stemming from the Commission's market reconstruction for fixed household refrigeration compressors in the EEA, which virtually covers the whole EEA market for fixed speed household refrigeration compressors. These market shares confirm the Parties' market share estimates.

¹³⁹ Form CO, paragraph 447 and figures 54 and 57.

¹⁴⁰ According to the Notifying Party's estimates, the combined entity's EEA value market shares for fixed speed household refrigeration compressors in 2017 was [40-50]%. For 2016, the Notifying Party was not able to provide market share figures (see *Reply to RFI 6, Annex 2*).

¹⁴¹ According to the Notifying Party's estimates, the combined entity's worldwide value market shares for fixed speed household refrigeration compressors in 2016 was [10-20]%, and in 2017 it was [10-20]% (see *Reply to RFI 6, Annex 2*).

Table 3: EEA market shares for fixed speed household refrigeration compressors, 2018.¹⁴²

Company	Volume share	Value share
Nidec	10-20%	20-30%
Embraco	10-20%	10-20%
<i>Combined</i>	<i>20-30%</i>	<i>30-40%</i>

Source: Commission's market reconstruction.

6.3.2.2. The Parties are not particularly close competitors

- (154) Respondents to the Commission's market investigation took the view that in relation to fixed speed household refrigeration compressors the Parties are not particularly close competitors.¹⁴³ For example, one customer of household compressors noted that: *"Today all producers of compressors are producing single speed compressors."*¹⁴⁴
- (155) While the Parties have an overlapping product portfolio in household refrigeration compressors,¹⁴⁵ customers and competitors explained that there is a range of EEA and non-EEA producers of fixed speed household refrigeration compressors that compete with the Parties in those products.

6.3.2.3. Competitive constraint from competitors

- (156) The Commission's market investigation showed that the market for fixed speed household refrigeration compressors is characterised by the presence of a number of suppliers both in the EEA and globally.¹⁴⁶ There are currently four main competitors of the Parties in the EEA, namely Changhong, Donper, GMCC and Wanbao/ACC, and eleven main competitors at the worldwide level, namely Changhong, Donper, GMCC, LG, Panasonic, Qianjiang, Samsung, Siberia, Tecumseh, Wanbao/ACC and Zelt.¹⁴⁷ Customers pointed out that fixed speed is an old technology in refrigeration compressors and virtually all compressor manufacturers produce fixed speed compressors.¹⁴⁸
- (157) Feedback from customers that responded to the Commission's market investigation also indicated that post-Transaction customers would have a sufficient number of suitable alternative options for sourcing fixed speed household refrigeration compressors.¹⁴⁹
- (158) Moreover, the majority of customers that responded to the Commission's market investigation observed that, due to a number of reasons, prices of fixed speed household refrigeration compressors in the EEA have been decreasing in the last five

¹⁴² The combined entity's EEA value market shares of the Commission market reconstruction for fixed speed household refrigeration compressors in 2016 was in the range 40-50% and in 2017 it was in the range 30-40%.

¹⁴³ Replies to Q2 – Questionnaire to Customers, q. 28.

¹⁴⁴ Minutes of a conference call with a customer, 26.7.2018, paragraph 6.

¹⁴⁵ Replies to Q2 – Questionnaire to Customers, q. 25.

¹⁴⁶ Replies to Q2 – Questionnaire to Customers, q. 15.

¹⁴⁷ Based on the Notifying Party's Reply to RFI 22.

¹⁴⁸ Replies to Q2 – Questionnaire to Customers, q. 15.

¹⁴⁹ Replies to Q2 – Questionnaire to Customers, q. 27.

years.¹⁵⁰ One of the reasons given for the price decrease has been the entry of new competitors and the pressure they exerted on the market.

- (159) While the Transaction leads to further concentration in the industry resulting in a reduction in a number of potential suppliers for customers of household refrigeration compressors,¹⁵¹ customers that responded to the Commission's market investigation did not generally express concerns as regards the effects of the Transaction on fixed speed household refrigeration compressors.
- (160) The majority of customers that expressed an opinion as to the effects of the Transaction on the price of fixed speed household refrigeration compressors did not expect a price increase.¹⁵² Similarly, the majority of customers that expressed an opinion as to the effects of the Transaction did not expect the Transaction to result in reduced availability or quality of fixed speed household refrigeration compressors.¹⁵³
- (161) Customers also did not expect that the Transaction would lead to a decrease in innovation in fixed speed household refrigeration compressors. Rather, a majority of customers that expressed an opinion expect an increase in innovation, while a number of OEM appliance manufacturers expect innovation to remain the same post-Transaction.¹⁵⁴
- (162) With respect to fixed speed household refrigeration compressors, one market participant noted: "*There is little room for technological innovation in single speed compressors, and price competition is getting intensified.*"¹⁵⁵

6.3.3. Conclusion

- (163) The Commission concludes that the Transaction does not give rise to a significant impediment to effective competition in the market for fixed speed household refrigeration compressors.

6.4. Competitive assessment of variable speed household refrigeration compressors

6.4.1. The Notifying Party's arguments

- (164) The Notifying Party submitted that the Transaction does not give rise to competition concerns in variable speed household refrigeration compressors due to a number of reasons.
- (165) First, the Notifying Party argued that the Parties' combined market share in variable speed household refrigeration compressors is low at the global level.¹⁵⁶ The Parties estimated their combined 2018 share of variable speed household refrigeration compressors to be [30-40]% by volume and [30-40]% by value at the global level.¹⁵⁷ In its Response to the Article 6(1)(c) decision, the Notifying Party proposed that the Commission should carry out a market reconstruction from a customer perspective, which, in their view, would show whether the Parties' estimates of their combined

¹⁵⁰ Replies to Q2 – Questionnaire to Customers, q. 31.1.

¹⁵¹ Replies to Q2 – Questionnaire to Customers, q. 37 and q. 38.

¹⁵² Replies to Q2 – Questionnaire to Customers, q. 39.

¹⁵³ Replies to Q2 – Questionnaire to Customers, q. 39.

¹⁵⁴ Replies to Q2 – Questionnaire to Customers, q. 39.

¹⁵⁵ Reply to Q2 – Questionnaire to Customers, q. 39.1.

¹⁵⁶ Notifying Party's Response to the Article 6(1)(c) decision, paragraph 54.

¹⁵⁷ Reply to RFI 22, "2018 actual market shares - Update", row 527.

market share in variable speed household refrigeration compressors worldwide are accurate and whether the market is worldwide in geographic scope.¹⁵⁸

- (166) Second, the Notifying Party submitted that the Parties are not close competitors for variable speed household refrigeration compressors.¹⁵⁹ In particular, it argued that while Embraco is indeed a leader in this market, Nidec's position is rather aspirational.¹⁶⁰ Moreover, the Notifying Party argued that the Commission has wrongly interpreted an internal document from Nidec¹⁶¹ to reach the conclusion that the company considers itself a market leader in variable speed household refrigeration compressors. According to the Notifying Party, Nidec was merely expressing an aspiration for the future in that document.¹⁶²
- (167) Third, in its Response to the Article 6(1)(c) decision, the Notifying Party argued that the Commission wrongly based its preliminary conclusions on the premise that there is a small number of four to five credible suppliers in the variable speed household refrigeration compressor market.¹⁶³ Conversely, the Notifying Party submitted that the Parties face competitive constraints from at least eight competitors active in variable speed household refrigeration compressors at the worldwide level (LG, Panasonic, Jiaxipera, Highly, GMCC, Donper, Samsung and Wanbao/ACC), many of which have entered the market in the last five years.¹⁶⁴ Those competitors would import many prototypes of their variable speed household refrigeration compressors into the EEA in order to win new customers. According to the Notifying Party, non-EEA suppliers may effectively compete in the EEA, without facing a competitive disadvantage due to their factory location.¹⁶⁵ [...].¹⁶⁶ [...].¹⁶⁷ The Notifying Party expects the competition from non-EEA players to increase in the future.¹⁶⁸
- (168) Fourth, the Notifying Party submitted that vertically integrated producers of variable speed household refrigeration compressors – among others, Panasonic, LG, Samsung, GMCC or TEE – make significant sales on the merchant market and thus exercise competitive pressure on the Parties.¹⁶⁹ Moreover, the Notifying Party argued that the vertically integrated players are technology leaders within variable speed¹⁷⁰ and are already actively marketing their variable speed household refrigeration compressors to third parties online, at trade shows and directly to business.¹⁷¹ In this

¹⁵⁸ Notifying Party's Response to the Article 6(1)(c) decision, paragraphs 16-19.

¹⁵⁹ Notifying Party's Response to the Article 6(1)(c) decision, paragraphs 59-67.

¹⁶⁰ Notifying Party's Response to the Article 6(1)(c) decision, paragraph 60 and 62 and Whirlpool's internal document, Reply to RFI 1, Annex 1, slide 12.

¹⁶¹ Nidec's internal document, Annex 10(2) to the Form CO, slide 10.

¹⁶² Notifying Party's Response to the Article 6(1)(c) decision, paragraph 65.

¹⁶³ Notifying Party's Response to the Article 6(1)(c) decision, paragraph 68.

¹⁶⁴ Notifying Party's Response to the Article 6(1)(c) decision, paragraphs 46, 47 and 70.

¹⁶⁵ Notifying Party's submission titled "Nidec/Embraco, Economic Analysis of the Variable Speed Household Segment" of 18 January 2019, Section 3.

¹⁶⁶ Notifying Party's submission titled "Nidec/Embraco, Economic Analysis of the Variable Speed Household Segment" of 18 January 2019, Section 4.2.

¹⁶⁷ Notifying Party's submission titled "Nidec/Embraco, Economic Analysis of the Variable Speed Household Segment" of 18 January 2019, Section 4.3.

¹⁶⁸ Notifying Party's submission titled "Nidec/Embraco, Economic Analysis of the Variable Speed Household Segment" of 18 January 2019, Section 4.4.

¹⁶⁹ Notifying Party's Response to the Article 6(1)(c) decision, paragraph 56.

¹⁷⁰ Notifying Party's submission titled "Nidec/Embraco, Economic Analysis of the Variable Speed Household Segment" of 18 January 2019, Section 5.1, page 17.

¹⁷¹ Notifying Party's submission titled "Nidec/Embraco, Economic Analysis of the Variable Speed Household Segment" of 18 January 2019, Section 5.1, page 18.

regard, the Notifying Party stated that Samsung and Panasonic actively promoted their variable speed compressors to the merchant market during the Chillventa International Exhibition on Refrigeration, AC & Ventilation and Heat Pumps that was held in Nuremberg from 16 to 18 October 2018.¹⁷²

- (169) In addition, the Notifying Party submitted that with regard to fixed speed and variable speed household refrigeration compressors, the merged entity will be constrained by powerful and sophisticated customers that can exert buyer power to secure competitive pricing.¹⁷³

6.4.2. *The Commission's assessment*

6.4.2.1. Market shares

- (170) Table 4 and Table 5 show market shares of the Parties for variable speed household refrigeration compressors in the EEA and worldwide, respectively. The figures are based on the Notifying Party's estimates.

- (171) Table 4 shows that in the EEA, according to the Notifying Party, the market share of the merged entity would be approximately [90-100]%, that is to say, the merged entity would be nearly a monopolist. The remaining competitors would have only a very negligible presence in the market.

Table 4: EEA market shares for variable speed household refrigeration compressors, 2018¹⁷⁴

Company	Volume share	Value share
Nidec	[10-20]%	[10-20]%
Embraco	[80-90]%	[80-90]%
<i>Combined</i>	<i>[90-100]%</i>	<i>[90-100]%</i>
Panasonic	[0-5]%	[0-5]%
Others	[0-5]%	[0-5]%
Market Size (in '000 units and USD million)	2,021	86

Source: Notifying Party's estimates – Reply to RFI 22.

- (172) Table 5 shows the market shares for variable speed household refrigeration compressors at worldwide level. The merged entity would be the largest player globally with a value share of approximately [30-40]%. The main competitors would be Changhong, with a value share of [20-30]%, and Donper, with a value share of [10-20]%.

¹⁷² Notifying Party's Response to the Article 6(1)(c) decision, paragraph 52.

¹⁷³ Form CO, paragraphs 535 and 543.

¹⁷⁴ According to the Notifying Party's estimates, the combined entity's EEA value market shares for variable speed household refrigeration compressors in 2017 was [70-80]%. For 2016, the Notifying Party was not able to provide market share figures (see *Reply to RFI 6, Annex 2*).

Table 5: Worldwide market shares for variable speed household refrigeration compressors, 2018¹⁷⁵

Company	Volume share	Value share
Nidec	[0-5]%	[0-5]%
Embraco	[20-30]%	[30-40]%
<i>Combined</i>	<i>[30-40]%</i>	<i>[30-40]%</i>
Changhong	[20-30]%	[20-30]%
Donper	[10-20]%	[10-20]%
GMCC	[5-10]%	[5-10]%
Highly	[5-10]%	[5-10]%
LG	[0-5]%	[0-5]%
Panasonic	[5-10]%	[5-10]%
Wanbao/ACC	[5-10]%	[5-10]%
Others	[0-5]%	[0-5]%
Market Size (in '000 units and USD million)	19,797	610

Source: Notifying Party's estimates - Reply to RFI 22.

- (173) The comparison between Table 4 and Table 5 shows that there are significant differences in the market positions of the manufacturers of variable speed household refrigeration compressors in the EEA and worldwide, as set out in recitals (98) to (101). First, the value share of the merged entity, while being significant both at the EEA level and worldwide, differs widely depending on the geographic scope: from an almost-monopolist position in the EEA to [30-40]% worldwide. Second, the number of competitors differs significantly, from virtually none in the EEA to several globally. Such differences indicate the high degree of geographic differentiation present in the market at worldwide level.
- (174) This degree of geographic differentiation implies that the market shares at worldwide level are not representative of the market power of the merged entity, because its market power is not uniform across the globe. Rather, as Table 4 shows, the merged entity's market power is particularly concentrated in the EEA.
- (175) As part of its Phase II investigation, the Commission also undertook a market reconstruction, as explained in recitals (143) to (148). The market shares based on the market reconstruction are shown in Table 6 and Table 7, for EEA and worldwide levels, respectively.
- (176) The EEA value shares presented in Table 6, which account for virtually all sales of variable speed household refrigeration compressors in the EEA, show that the

¹⁷⁵ According to the Notifying Party's estimates, the combined entity's worldwide value market shares for variable speed household refrigeration compressors in 2016 was [30-40]% and in 2017 was [30-40]% (see *Reply to RFI 6, Annex 2*).

Parties' combined market share for 2018 is in the range of 90–100%. This broadly confirms the figures provided by the Notifying Party.¹⁷⁶

Table 6: EEA market shares for variable speed household refrigeration compressors, 2018

Company	Volume share	Value share
Nidec	10-20%	10-20%
Embraco	70-80%	80-90%
<i>Combined</i>	<i>90-100%</i>	<i>90-100%</i>

Source: Commission's Phase II market reconstruction.

- (177) Conversely, the worldwide value shares presented in Table 7 show that the Parties' combined market share for 2018 is in the range of 80–90%, which is much higher than the estimates provided by the Notifying Party. However, the Commission considers that the reliability of the worldwide market shares is limited, because the market reconstruction achieves a low sales coverage globally (~30%).

Table 7: Worldwide market shares for variable speed household, 2018.

Company	Volume share	Value share
Nidec	5-10%	5-10%
Embraco	70-80%	70-80%
<i>Combined</i>	<i>80-90%</i>	<i>80-90%</i>

Source: Commission's Phase II market reconstruction.

- (178) As stated in recital (146), the Commission's market reconstruction covers a period from 2016 to 2020. Therefore, it includes projections of the customers' future purchases for the years 2019 and 2020. Table 8 shows the Parties' value shares in the EEA over time for the full period covered by the market reconstruction.¹⁷⁷
- (179) Based on the customers' data, the Parties' combined value share in the EEA for variable speed household refrigeration compressors remains relatively constant in the range 90–100% for four years over the period the period 2016–2019, and it decreases slightly to the range 70–80% in 2020. Such a decrease is due to the entry of competitors into the variable speed household refrigeration compressors EEA market. Despite this entry, the merged entity's combined market share would nevertheless remain very high, and the merged entity would still enjoy a dominant market position.

¹⁷⁶ The Commission notes, however, that there is a discrepancy in the identity of the competitors in the Notifying Party's figures (see Table 4) and the information available to the Commission. Such discrepancy would not change the Commission's overall assessment in the EEA variable speed household compressors market. The Commission considers that the information it has available is more reliable for the assessment of the competitive landscape in the EEA market.

¹⁷⁷ Worldwide market shares are not shown due to the coverage limitations of the market reconstruction at worldwide level, and the consequent lack of reliability of the market shares based on it.

Table 8: EEA value shares for variable speed household refrigeration compressors, 2016-2020.¹⁷⁸

Company	Value share				
	2016	2017	2018	2019	2020
Embraco	80-90%	70-80%	80-90%	70-80%	70-80%
Nidec	10-20%	10-20%	10-20%	10-20%	5-10%
<i>Combined</i>	<i>90-100%</i>	<i>90-100%</i>	<i>90-100%</i>	<i>90-100%</i>	<i>70-80%</i>

Source: Commission's Phase II market reconstruction.

- (180) Finally, Table 9 shows the Parties' combined value share in the EEA over time including captive sales, that is to say, including the internal sales of compressors by integrated appliance manufacturers. As explained in recital (137), the potential and indirect constraint of captive sales appears to be weak in the variable speed household refrigeration compressors market, and hence the Commission considers the market shares based on the merchant market more representative of the merged entity's market power.
- (181) Furthermore, Table 9 shows that even when including the captive sales, the merged entity would have a dominant market position in the EEA in 2018 and going forward. In 2018, the merged entity would have a value share between 80–90% in the EEA and also in the two previous years. Going forward, the merged entity would have a value share of 70–80% in the EEA in 2019 and 2020. The range for 2018 is in line with the figure provided by the Notifying Party, specifically a value share of [80-90]%.¹⁷⁹ Worldwide value shares including captive sales would be significantly lower,¹⁸⁰ but the Commission considers those market shares figures as not reliable for approximating the market power of the merged entity. They are not representative due to the differentiated nature of the worldwide geographic market and because they include the captive sales of vertically integrated players.

Table 9: EEA value shares for variable speed household refrigeration compressors including captive sales, 2016-2020

Company	Value share				
	2016	2017	2018	2019	2020
Embraco	70-80%	60-70%	60-70%	60-70%	60-70%
Nidec	5-10%	10-20%	10-20%	5-10%	5-10%
<i>Combined</i>	<i>80-90%</i>	<i>80-90%</i>	<i>80-90%</i>	<i>70-80%</i>	<i>70-80%</i>

Source: Commission's Phase II market reconstruction.

¹⁷⁸ The value shares exclude for the full period the suppliers who did not provide projections for 2019 and 2020. This decreases the coverage of the market reconstruction to 75% of sales in the EEA.

¹⁷⁹ Reply to RFI 22.

¹⁸⁰ The Notifying Party estimates a value share for the combined entity of [20-30]% worldwide. See Reply to RFI 22.

- (182) In sum, the Commission considers that Embraco currently holds a market share indicative of dominance¹⁸¹ on the market for variable speed household refrigeration compressors in the EEA or in a clearly differentiated EEA region in a possible worldwide market. The combination of Embraco and Nidec would lead to a further strengthening of this market position with a share indicative of dominance.
- (183) The highly concentrated nature of the market for variable speed household refrigeration compressors was also put forward by market participants. A competitor active in the market submitted: "*... where the merged entity would hold a quasi-monopolistic market share around [90-100]%(in value) and [90-100]%(in volume) in the post-transaction scenario. [The company] - i.e., the only other player currently active on this market - would not be able to counterweight the anti-competitive effects stemming from the transaction. This also considering the huge technological gap between Nidec and, in particular, Embraco, on the one hand, and [the company], on the other hand. Both Nidec and Embraco are important innovators on the variable speed household refrigeration compressor market. Furthermore, they are currently launching new variable speed families: FMX for Embraco; new family based on Delta for Nidec.*"¹⁸²

6.4.2.2. Variable speed – new technology and technology of the future

- (184) Unlike in fixed speed household refrigeration compressors, where the Commission's market investigation showed that the market is characterised by the presence of a number of suppliers, the feedback from the Commission's investigation with respect to variable speed household refrigeration compressors confirmed that the variable speed technology has not yet been mastered by many suppliers. Respondent customers confirmed that there are fewer suppliers that offer variable speed technology to the market.¹⁸³
- (185) Embraco developed the variable speed technology almost 20 years ago.¹⁸⁴ Since then, a number of other compressor manufacturers have invested in R&D in order to develop their own variable speed refrigeration compressors for household appliances. However, as noted by a customer, variable speed refrigeration compressors are "*more sophisticated in terms of technology and use. Not all compressor manufacturers offer reliable variable speed compressors.*"¹⁸⁵
- (186) Variable speed refrigeration compressors feature a number of characteristics, making them the more advanced technology for refrigeration compressors. In particular, the variable speed technology enables a compressor to achieve better performance in a number of parameters. For example, variable speed refrigeration compressors are more energy efficient and quieter.
- (187) The energy efficiency and noise of a household refrigeration compressor is particularly important for household appliance manufacturers. The energy efficiency standards are regulated across countries.¹⁸⁶ For instance, in the Union, appliances'

¹⁸¹ Horizontal Merger Guidelines, paragraph 17 states: "According to well-established case law, very large market shares – 50% or more – may in themselves be evidence of the existence of a dominant market position."

¹⁸² Reply to Q1 – Questionnaire to Competitors, q. 32.

¹⁸³ Replies to Q2 – Questionnaire to Customers, q. 13.1 and q. 15.

¹⁸⁴ Internet article titled "Compressors of variable speed: A reality in the market" dated 25 April 2018 written by Embraco, Doc ID 3047.

¹⁸⁵ Reply to Q2 – Questionnaire to Customers, q. 15.

¹⁸⁶ Embraco's internal document, Reply to RFI 2, Annex 21(4), slide 35.

energy consumption is regulated by Union legislation.¹⁸⁷ In accordance with this EU legislation, the energy efficiency standards will increase further in the near future. This will make the energy efficiency criteria even more stringent. [...] ¹⁸⁸ [...].

Figure 6 – [...]

[...]

Source: [...].

- (188) In order for appliance manufacturers to be able to meet the upcoming more stringent energy efficiency regulations, the efficiency of a refrigeration compressor is likely to become even more important than today. Market participants confirmed that compressors of the low to medium energy efficiency class can be produced by using both variable and fixed speed technology. However, in order to produce compressors of high efficiency, i.e. best in class, variable speed is *"the unique solution"*.¹⁸⁹ As confirmed by an appliance manufacturer: *"The market trend of high efficient appliances push the manufacturer to use high efficient variable speed compressors."*¹⁹⁰
- (189) Thus, it would seem that the use of variable speed household refrigeration compressors will increase in the coming years. In fact, competitors that responded to the Commission's market investigation expect the demand for variable speed refrigeration compressors to increase in the next 5 years.¹⁹¹ Similarly, customers confirmed that there is a trend towards variable speed household refrigeration compressors in the EEA, mainly due to the energy efficiency regulations.¹⁹² A major customer of household refrigeration compressors also noted that they expect the demand for variable speed household refrigeration compressors to increase in the next years and the volume to double.¹⁹³
- (190) The expected increase in demand for variable speed household refrigeration compressors is also shown across a number of internal documents of the Parties. [...].
- (191) An internal strategy document [...].¹⁹⁴

Figure 7 – [...]

[...]

Source: Annex 10(2) to the Form CO, slide 95.

- (192) Furthermore, Nidec expects [...].¹⁹⁵

¹⁸⁷ Form CO, footnote 52: The Ecodesign Directive (2009/125/EC) sets out minimum requirements for the energy efficiency of products, and has been applied to refrigerators by Commission Regulation (EC) 643/2009 and Commission Regulation (EU) 2015/1095. Such regulations have introduced energy efficiency standards which, by operation of their provisions, have increased in stringency at regular intervals since 2010, with the next such increase due on 1 July 2019. Such regulations are complemented by product labelling requirements, which have been applied to refrigerators by Commission Regulation (EU) 1060/2010 and by Commission Delegated Regulation (EU) 2015/1094, under Directive 2010/30/EU (replaced in 2017 by Regulation (EU) 2017/1369).

¹⁸⁸ Embraco's internal document, Reply to RFI 2, Annex 21(4), slide 37.

¹⁸⁹ Replies to Q2 – Questionnaire to Customers, q. 16.

¹⁹⁰ Reply to Q2 – Questionnaire to Customers, q. 32.

¹⁹¹ Replies to Q1 – Questionnaire to Competitors, q. 40.

¹⁹² Replies to Q2 – Questionnaire to Customers, q. 32.

¹⁹³ Minutes of a conference call with a customer, 18.12.2018, paragraph 18.

¹⁹⁴ Nidec's internal document titled [...] dated [...], submitted as Annex 10(2) to the Form CO, slide 95.

Figure 8 – [...]

[...]

Source: Annex 10(2) to the Form CO, slide 98.

- (193) Moreover, in the same internal presentation [...].¹⁹⁶ [...].

Figure 9 – [...]

[...]

Source: Annex 10(2) to the Form CO, slide 82.

- (194) [...].

- (195) [...].

Figure 10 – [...]

[...]

Source: [...].

6.4.2.3. The Parties are close competitors with their current portfolio of variable speed household refrigeration compressors

- (196) First, the Commission's market investigation revealed the strong positions of the Parties on the market for variable speed household refrigeration compressors as reflected in the market shares, in particular in the EEA. The results of the market investigation support the view that in variable speed household refrigeration compressors the Parties are close competitors.¹⁹⁷

- (197) Second, the feedback from the Commission's market investigation shows that customers see the Parties as close competitors for household variable speed refrigeration compressors with an overlapping portfolio. Moreover, some customers indicated that the Parties were the closest competitors for variable speed refrigeration compressors. Some customers also identified Jiaxipera (Changhong) as being a close competitor of the Parties, while identifying Embraco as the market leader in variable speed household compressors.¹⁹⁸ Some customers that responded to the Commission's market investigation also identified Jiaxipera's (Changhong) variable speed household refrigeration compressor model as the closest substitute to Nidec's models and some of Embraco's variable speed household compressors models.¹⁹⁹

- (198) Third, respondent customers observed that variable speed technology is a more complex technology that is not offered by all household refrigeration compressor manufacturers. In the words of one customer: *"There is a significant reliability gap between the best and the worst variable speed technology. Embraco is a leader in this technology."*²⁰⁰ Another customer also pointed out that Embraco has market power in the area of variable speed refrigeration compressors, as this is a new technology for some suppliers.²⁰¹

¹⁹⁵ Nidec's internal document titled [...] dated [...], submitted as, Annex 10(2) to the Form CO, slide 98.

¹⁹⁶ Annex 10(2) to the Form CO, slide 82.

¹⁹⁷ Replies to Q2 – Questionnaire to Customers, q. 29.

¹⁹⁸ Replies to Q2 – Questionnaire to Customers, q. 29.1 and q. 29.2.

¹⁹⁹ Replies to Phase II Questionnaire to Customers, q. 8 and q. 9.

²⁰⁰ Reply to Q2 – Questionnaire to Customers, q. 15.

²⁰¹ Reply to Q2 – Questionnaire to Customers, q. 29.2.

- (199) Fourth, with regard to quality, customers also highlighted Embraco's and Nidec's excellence when it comes to technology and quality of their variable speed household refrigeration compressors. The majority of customers that responded to the Commission's market investigation indicated both Embraco and Nidec among the top compressor manufacturers for household applications in terms of their technological ability and capacity to innovate.²⁰² One appliance producer noted, specifically with regard to variable speed household refrigeration compressors: "*Nidec (Secop as subsidiary) is currently supplying [the company]. So does Embraco. Both have an excellent technology for variable speed and compete for the same volume.*"²⁰³
- (200) The Parties', and in particular Embraco's, leadership and excellence in quality of their variable speed household refrigeration compressors is an important factor for customers. Customers' feedback from the Phase I investigation indicates that customers sourcing household refrigeration compressors consider a number of criteria when choosing a supplier, including price, performance of products, technology, quality, as well as technical feedback on research and development.²⁰⁴
- (201) Fifth, technological gaps among suppliers were also specifically stated by a competitor that is, based on the Commission's market reconstruction conducted during the Phase II investigation, currently the only other supplier of variable speed household refrigeration compressors in the EEA. This competitor considered that: "*in the post-Transaction scenario, therefore, the technological gap between the products of the Merged Entity, on the one hand, and those of [the company] and the Purchaser, on the other hand, would still be material*".²⁰⁵ According to this competitor, "*the merger, in fact, would concentrate the only two innovators in the EEA market for household variable speed refrigeration compressors.*"²⁰⁶ Such technological gaps seem to suggest that in the EEA, out of the three currently established suppliers, only two can compete in the same level playing field, namely Embraco and Nidec.
- (202) Sixth, the evidence obtained during the Commission's investigation also shows that based on the Parties' current portfolio of variable speed household refrigeration compressor models, the Parties are close competitions.
- (203) More specifically, the feedback from customers shows that Embraco is considered as the market leader and technological leader in variable speed household refrigeration compressors and a Tier 1 supplier for those customers that distinguish between different categories of suppliers.²⁰⁷
- (204) Nidec's competitive advantage, on the other hand, seems to also benefit from the long-standing reputation of the Secop brand and its strength in fixed speed household refrigeration compressors as well as light commercial refrigeration compressors. A large majority of market participants that responded to the Commission's market test in Phase I agreed that Secop is an important brand in the refrigeration compressors

²⁰² Replies to Q2 – Questionnaire to Customers, q. 30.

²⁰³ Reply to Q2 – Questionnaire to Customers, q. 25.

²⁰⁴ Replies to Q2 – Questionnaire to Customers, q. 26; Minutes of a conference call with a customer, 26.7.2018, paragraph 18.

²⁰⁵ Reply to the Questionnaire on commitments offered by Nidec, q. 2.1.

²⁰⁶ Reply to the Questionnaire on commitments offered by Nidec, q. 2.1.

²⁰⁷ Replies to Phase II Questionnaire to Customers, q. 11.

industry.²⁰⁸ Therefore, while Nidec's current portfolio may not be technologically at par with Embraco's, customers still consider them as close competitors.

(205) Seventh, the closeness of competition between the Parties is also demonstrated by the Parties' internal documents. For instance, Embraco's internal documents show that the company uses its business intelligence and closely monitors Nidec's [...].

(206) [...].²⁰⁹

Figure 11 – [...]

[...]

Source: [...].

(207) [...]²¹⁰ Therefore, it seems that following the acquisition of Secop by Nidec, Nidec has been a driver of competition. This competition would be lost as a result of the Transaction. [...]²¹¹ This close monitoring combined with such observations further shows that Embraco considers Nidec as a close competitor in household refrigeration compressors.

(208) Moreover, Embraco's competitor monitoring of Nidec/Secop seems to suggest that Embraco pays close attention to Nidec's next moves. [...].²¹²

(209) [...].²¹³

(210) [...].²¹⁴

(211) Finally, internal documents of the Parties also show that the Parties consider themselves as market leaders in variable speed technology. [...].²¹⁵ [...].

6.4.2.4. Dynamic competition between the Parties in variable speed household refrigeration compressors through pipeline products

(212) In addition to being close competitors with their current variable speed household refrigeration compressors portfolio, the Commission's investigation shows and further confirms that the competition between Nidec and Embraco was, absent the merger, likely to intensify. Nidec, following the acquisition of Secop in 2017, have made a strategic decision to further grow the company's presence in the household refrigeration compressors market. [...].²¹⁶ [...].²¹⁷

(213) Moreover, Nidec's goal of re-entering the household market by strengthening its presence in this market is largely built on upgrading and investing in its variable speed household refrigeration compressors portfolio.

²⁰⁸ Replies to the Questionnaire on commitments offered by Nidec, q. 16 and q. 16.1.

²⁰⁹ Embraco's internal document, slides 75, 76 and 78, Doc Id:1534-40501 (EMB-EC-00212440.pptx).

²¹⁰ Embraco's internal document, presentation titled [...], Doc Id: 1532-35294 (EMB-EC-00158306), slide 27.

²¹¹ Embraco's internal document, presentation titled [...], Doc Id: 1532-35294 (EMB-EC-00158306), slide 31.

²¹² Embraco's internal document, presentation titled [...], Doc Id:1534-40501 (EMB-EC-00212440.pptx), slide 89.

²¹³ Embraco's internal document, presentation titled [...], Doc Id:1534-40501 (EMB-EC-00212440.pptx), slide 90.

²¹⁴ Embraco's internal document, presentation titled [...], Doc Id:1534-40501 (EMB-EC-00212440.pptx), slide 82.

²¹⁵ For example Embraco's internal document, Reply to RFI 2, Annex 21(4), slide 47.

²¹⁶ Nidec's internal document titled [...] dated [...], Doc Id:1513-46508 (NID00174308.pptx), slide 90.

²¹⁷ Nidec's internal document, Annex 10(2) to the Form CO, slide 10.

(214) Following the acquisition of Secop and prior to winning the bid to acquire Embraco, Nidec had identified a number of projects to become an even stronger supplier of household refrigeration compressors and to upgrade its portfolio in a way that would allow it to compete for the expected increase in demand for variable speed household refrigeration compressors. [...].²¹⁸ [...].²¹⁹

(215) Nidec's [...].

Figure 12 – [...]

[...]

Source: [...].

(216) Another slide titled [...], Nidec outlined [...]. Thus, these projects were not just mere ideas, but concrete plans supported by financial investments where the R&D and engineering works had been put in motion.

Figure 13 – [...]

[...]

Source: [...].

(217) Another strategic document, [...].²²⁰ [...].

Figure 14 – [...]

[...]

Source: [...].

(218) Nidec's [...].

Figure 15 – [...]

[...]

Source: [...].

Figure 16 – [...]

[...]

Source: [...].

(219) In an even more recent document, [...].

Figure 17 – [...]

[...]

Source: [...].

(220) In addition, [...].

Figure 18 – [...]

[...]

Source: [...].

²¹⁸ [...] dated [...], Annex 10(2) to the Form CO.

²¹⁹ Reply to Questionnaire on commitments offered by Nidec, q. 9.1; reply to Phase II Questionnaire on commitments offered by Nidec, q. 4.1.

²²⁰ [...] dated [...], Doc Id:1513-46508 (NID00174308.pptx), slide 98.

(221) Also, Nidec has [...].²²¹ [...].²²² [...].²²³ [...].²²⁴

Figure 19 – [...]

[...]

Source: [...].

(222) Furthermore, [...].²²⁵ [...].

Figure 20 – [...]

[...]

Source: [...].

(223) In another internal document [...].²²⁶ [...].

Figure 21 – [...]

[...]

Source: [...].

(224) Moreover, the competitiveness of Nidec's pipeline products is echoed in Embraco's internal documents. [...].

(225) [...].²²⁷

(226) [...].²²⁸

Figure 22 – [...]

[...]

Source: [...].

(227) Thus, as a result of the Transaction, the dynamic competition between the Parties would be lost. [Post-Transaction consolidation plans].²²⁹ Such consolidation would in fact reduce customers' choice of product models and the elimination of head-to-head competition between the Parties would have an impact in the EEA and also in other geographical regions.

6.4.2.5. Limited competitive constraints from competitors

(228) While it seems that there will be considerable demand for variable speed household refrigeration compressors in the future, the Commission's market investigation showed that the merged entity would face limited constraints from competitors in this market. A number of different customers noted, for instance:

(a) *"...variable speed compressors is a relatively new technology which at this stage has a very limited competition."*

²²¹ [...].

²²² [...].

²²³ [...].

²²⁴ Nidec's internal document, presentation titled [...] dated [...]; Doc Id:1510-29737 (NID00127066.pptx), slide 54.

²²⁵ Nidec's internal document, presentation titled [...] dated [...], Doc Id: 1510-53057 (NID00224712.pptx), slide 37.

²²⁶ Nidec's internal document, presentation titled [...], not dated, Doc Id: 1513-035458 (NID00127281.pptx), slide 9.

²²⁷ Embraco's internal document titled [...], Doc Id:1533-16805, (EMB-EC-00016684), slide 2.

²²⁸ Embraco's internal document titled [...], Doc Id: 1534-020262 (EMB-EC-00061990.pdf), page 4.

²²⁹ Internal email of Nidec from [...] to [...] sent on [...], Doc Id: 1512-40826 (NID00218084).

- (b) *"In the high efficient segment the number of suppliers is smaller, as not every supplier is able to reach this efficiency segment. The main suppliers in this segment today are Embraco, Panasonic, Nidec and LG."*
- (c) *"...Only a few of them [suppliers] can provide high efficiency compressors with reliable performance and quality."*
- (d) *"High efficiency level need strong resources and R&D."²³⁰*
- (229) Customers that responded to the Phase I market investigation indicated that the number of producers of variable speed refrigeration compressors is limited to 4-5 suppliers, especially if a customer requires good quality.²³¹ These producers include vertically integrated producers such as LG, Panasonic and Samsung. Moreover, a customer that sources variable speed household refrigeration compressors noted that Jiaxipera (Changhong group) has only started producing variable speed refrigeration compressors a few months ago.²³²
- (230) The assessment of the competitive constraint from competitors in this sub-section 6.4.2.5 is structured as follows: the competitive constraint from vertically integrated players is assessed under heading 6.4.2.5.a; and the competitive constraint currently exercised by Chinese rivals is assessed under heading 6.4.2.5.b.
- a. Competitive constraint from vertically integrated players*
- (231) As regards the constraint on the Parties by vertically integrated players, customers in the EEA do not seem to consider integrated players, in particular LG, Samsung and Panasonic, as an alternative source of supply. There seem to be several reasons why customers are reluctant to source variable speed household refrigeration compressors from vertically integrated players and why these suppliers' competitive constraint on the merged entity would be limited post-Transaction.
- (232) First, some customers do not source from vertically integrated producers of compressors because these producers are the customers' competitors in the downstream market of refrigeration appliances.²³³ In particular, sourcing from a competitor could be problematic when it comes to sourcing refrigeration compressors that need to be co-developed with the refrigeration compressor manufacturer. Joint R&D initiatives between refrigeration compressor manufacturers and appliance producers take place in particular with regard to the technologically more advanced models where customers aim at achieving a competitive edge. According to an appliance manufacturer: *"The compressor is the most important component of a refrigerator... [the company's] engineers know the appliances and their potential weaknesses, e.g. pressure, noise, so they find solutions together with the compressor engineers."*²³⁴ Therefore, it is likely that in order to find these technological solutions together, a customer would need to share certain information that could be competitively sensitive to a competitor downstream if they were to work on such solutions with a vertically integrated compressor manufacturer.
- (233) Second, some customers that responded to the Commission's market investigation noted that variable speed household refrigeration compressors offered by vertically

²³⁰ Replies to Q2 – Questionnaire to Customers, q. 16.

²³¹ Replies to Q2 – Questionnaire to Customers, q. 15.

²³² Minutes of a conference call with a customer, 30.8.2018, paragraph 3.

²³³ Replies to Q2 – Questionnaire to Customers, q. 27; replies to Phase II questionnaire to customers, q. 6.

²³⁴ Minutes of a conference call with a customer, 30.8.2018, paragraph 24.

integrated suppliers are more expensive.²³⁵ For these customers, higher price is the reason why they would not source compressors from the vertically integrated suppliers.

- (234) Third, the production of refrigeration compressors of vertically integrated OEMs, such as LG and Samsung is mainly dedicated for in-house (captive) use.²³⁶ In this respect, one competitor noted: *"Samsung has no significant sales on the merchant sector for household refrigeration compressors at EEA level. [The company] deems that Samsung will have no incentive to divert part of its current captive production to the merchant market in the post-transaction scenario, and the OEMs will have no incentive to purchase their requirements from Samsung. This is due to a number of factors, such as: (i) Samsung needs its internal production of household refrigeration compressors for its downstream production of refrigerators; (ii) Samsung has no commercial relationship with the OEMs - i.e., the customers - in this context; (iii) Samsung competes downstream with the OEMs, i.e., the customers; this implies that the former have no incentive to benefit the latter, and vice-versa. A similar reasoning applies with respect to LG."*²³⁷
- (235) Fourth, the limited presence of the vertically integrated players on the merchant market seems to be supported also by the quantitative data provided to the Commission by customers in the context of the Phase II market reconstruction exercise. In particular, in the EEA the three vertically integrated players (LG, Samsung and Panasonic) have very limited sales to customers on the merchant market. These sales represent 0–5% of the EEA market for variable speed household refrigeration compressors.
- (236) Fifth, the limited constraint from vertically integrated players seems to be also reflected in the 2018 market shares provided by the Parties.²³⁸ The Parties' combined EEA market share of [90-100]% in volume and [90-100]% in value stands in a sharp contrast to the argument that vertically integrated players would be a constraint on the merged entity post-Transaction. In fact, based on the Parties' data, the only other player with more than [0-5]% market share in the EEA in 2018 was Panasonic with [0-5]% market share (volume) and [0-5]% market share (value), as shown in Table 4.
- (237) Finally, the Commission notes that while Embraco is part of the Whirlpool group, customers do not seem to consider Embraco as a vertically integrated player such as Panasonic, Samsung and LG. This can be explained by the fact that Embraco, a Brazilian company that was founded in 1971, had been a self-standing refrigeration compressor manufacturer for a long time, before Whirlpool acquired a majority stake in Embraco in 1997. Therefore, customer relationships between many customers and Embraco predate its acquisition by Whirlpool. Moreover, Embraco does not market its compressors under the Whirlpool brand. Thus, from a marketing perspective, it is acceptable for a refrigeration appliance manufacturer to source variable speed household refrigeration compressors from Embraco, because the Embraco compressor built in that customer's refrigeration appliance would not be labelled as "Whirlpool" (a competing brand in refrigeration appliances) but rather "Embraco".

²³⁵ Replies to Phase II questionnaire to customers, q. 6.

²³⁶ Minutes of a conference call with a customer, 26.7.2018, paragraph 12.

²³⁷ Reply to Q1 – Questionnaire to competitors, q. 41.

²³⁸ Parties' reply to RFI 22.

(238) Therefore, based on the qualitative and quantitative feedback and evidence, the Commission considers that vertically integrated players' competitive constraint on the merged entity post-Transaction would be very limited.

b. Competitive constraint from Chinese rivals

(239) First, while non-EEA rivals' variable speed household refrigeration compressors might be capable of achieving good performance, European customers limited their sourcing to the top three suppliers in 2018. Based on the customers' data²³⁹, a vast majority of the volumes were sourced from the Parties, in addition to marginal volumes sourced from only one competitor. Competitive constraints therefore currently appear to be limited.

(240) Second, customers negotiate orders with their suppliers of refrigeration compressors well in advance. While the Parties submitted that customers arrange their sourcing by holding tenders,²⁴⁰ the feedback from the market investigation suggests that customers in fact select their suppliers of household refrigeration compressors by holding bilateral negotiations, during which technical requirements, product characteristics as well as prices are negotiated.²⁴¹ This was also confirmed by the Parties' competitors in the Commission's market investigation.²⁴²

(241) Negotiations and orders of compressors usually take place several months before the delivery date. Therefore, as part of the Commission's Phase II market reconstruction, customers of variable speed household refrigeration compressors were requested to provide their sourcing data for the year 2018, as well as their planned orders for 2019. Given that commercial negotiations and orders are agreed in advance, at the beginning of 2019 customers are mostly in a position to estimate their planned orders for, at least, 2019.

(242) Third, in 2019 the picture does not appear that different. Some customers that responded to the Commission's market investigation noted that for 2019 they had concluded contracts with, or were currently testing products, from a very limited number of Chinese manufacturers. However, testing a new potential supplier is a process that may or may not result in a qualification of that supplier for variable speed household refrigeration compressors.²⁴³ Customers seem to have planned orders from the Parties, which will continue to be significant and providing market shares clearly above the level indicative of dominance. In fact, while some customers indicated that they have made orders or are currently in the process of qualifying new suppliers, the orders and qualification seems to be limited to a very small number of Chinese suppliers.²⁴⁴

(243) Thus, the Commission's market investigation does not support the Parties' argument as regards the diversified supplier base of variable speed household refrigeration compressors. While a number of additional companies may have a model and/or a prototype of a variable speed household refrigeration compressor in their portfolio, the evidence obtained by the Commission in the course of its market investigation,

²³⁹ Replies to the Commission's Phase II market reconstruction (2018 data).

²⁴⁰ Form CO, paragraph 440.

²⁴¹ Replies to Q2 – Questionnaire to Customers, q. 26.

²⁴² Replies to Q1 – Questionnaire to Competitors, q. 33.

²⁴³ Replies to Phase II Questionnaire to Customers, q. 4 and replies to the Commission's Phase II market reconstruction.

²⁴⁴ Replies to Phase II Questionnaire to Customers, q. 4; and replies to the Commission's Phase II market reconstruction.

which is based on actual data from customers, shows that customers do not currently buy these models. Therefore, it seems that the competitiveness of such additional suppliers as regards their variable speed household refrigeration compressors is limited and these suppliers are not a real alternative to the Parties, in particular for customers that sell household refrigeration appliances in the EEA.

- (244) Based on the qualitative and quantitative feedback and evidence, the Commission considers that the Chinese suppliers that are currently present on the market would impose only a limited competitive constraint on the merged entity post-Transaction.

6.4.2.6. Market entry – not a sufficient competitive constraint

- (245) In order for market 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.²⁴⁵ For entry to be likely, it must be sufficiently profitable taking into account the price effects of injecting additional output into the market and the potential responses of the incumbents.
- (246) As regards the timeliness of entry, the Commission examines whether entry would be sufficiently swift and sustained to deter or defeat the exercise of market power. Entry is normally only considered timely if it occurs within two years.²⁴⁶
- (247) Moreover, entry must be of sufficient scope and magnitude to deter or defeat the anti-competitive effects of the merger in order to be considered.²⁴⁷
- (248) First, regarding the likelihood of a market entry by Chinese rivals, the Commission's market investigation shows that some Chinese players are likely to enter the market of variable speed household refrigeration compressors in the future. Indeed, some customers have made limited orders and/or are in the process of qualifying a limited number of Chinese suppliers, as described in recital (242). Moreover, a submission by the Notifying Party suggests that Chinese manufacturers import many prototypes of their variable speed household refrigeration compressors into the EEA in order to win new customers and actively approach European customers.²⁴⁸
- (249) However, likelihood of an entry is only one of the three conditions that need to be met in order for the Commission to consider market entry as a sufficient competitive constraint on the Parties.
- (250) Second, while the Parties draw a parallel with the Chinese expansion into fixed speed household refrigeration compressors, this past occurrence does not seem to suggest a timely expansion on a large scale. In fact, the Chinese expansion in the household segment overall (that is to say, largely fixed speed household refrigeration compressors) took more than ten years. According to the Parties' submission, Chinese players' market share in the EEA increased from 5% in 2006 to 12% by 2008,²⁴⁹ that is to say, during two years. Thus, in fixed speed household refrigeration compressors, during the timeframe that would be considered for a timely market entry, the Chinese suppliers' market share increased only to 12%. It was only over a longer timeframe, that the Chinese players expanded their market share significantly.

²⁴⁵ Horizontal Merger Guidelines, paragraph 68.

²⁴⁶ Horizontal Merger Guidelines, paragraph 74.

²⁴⁷ Horizontal Merger Guidelines, paragraph 75.

²⁴⁸ The Notifying Party's submission prepared by RBB Economics titled "Nidec/Embraco – Economic Analysis of the Variable Speed Household Segment" dated 18 January 2019, page 10.

²⁴⁹ Between 2006 and 2008, the Parties' submission refers to the region being classified as the EU.

For example, the Chinese players (several players combined) reached a 30% market share in 2013, which by 2017 increased to 54%.²⁵⁰ However, ten years, or even seven years if one considers the 2013 market share of 30%, is a timeframe that goes well beyond the timeframe that could be considered by the Commission for a ‘timely entry’. Furthermore, this submission of the Parties does not show the market shares of the Parties for that given period that would allow a comparison of the respective market shares in order to assess the Parties’ market power at the time.

- (251) Moreover, a timely entry has not been supported by the feedback obtained as part of the Commission’s investigation. Based on the customers’ feedback used for the Commission’s market reconstruction, only a very limited number of Chinese players would gain market share in the supply of variable speed household refrigeration compressors in the EEA in the next two years. These new entrants would increase their market share from virtually zero to a small market share. At the same time, as shown at Table 8 the merged entity’s market share in the EEA in 2020 is still forecast to remain very high, clearly above the level indicative of dominance ([70-80%]).
- (252) While some competitors may have the ambition to enter the market for variable speed household refrigeration compressors, customers that responded to the Commission’s market investigation are either not testing new suppliers or only testing a limited number of new suppliers.²⁵¹ This may be due to the fact that other suppliers have not yet developed a competitive and reliable model that would satisfy the customers’ requirements, in particular in the EEA.
- (253) Third, as regards demand, feedback from customers that responded to the Commission’s market investigation suggests that market entry in the next two years would not be sufficient. Customers’ forecasts as regards their planned procurement of variable speed household refrigeration compressors show that while customers may diversify their supplier base to some extent, the diversification and volumes that would be sourced from new suppliers would not be of a sufficient scope and magnitude. The quantitative data is also reflected in the qualitative feedback provided by customers. In terms of qualifying additional or new suppliers, customers that responded to the Commission’s market investigation either confirmed that they are currently not planning to qualify new suppliers, or if they do, the supplier which they are in the process of qualifying are players that are already present on the market, even if just marginally.²⁵²

6.4.2.7. A reduction of competition and price increases feared by market participants

- (254) As regards the effects of the Transaction, a number of customers of household refrigeration compressors reported that the Transaction would result in a further concentration of the industry. As a result, the competition between compressor suppliers will decrease.²⁵³ A large customer noted, in particular with respect to

²⁵⁰ The Parties’ submission prepared by RBB Economics titled “*Nidec/Embraco – Economic Analysis of the Variable Speed Household Segment*” dated 18 January 2019, page 17; and the Parties’ presentation titled “*M.8947 Nidec/Whirlpool (Embraco Business) - Presentation to the European Commission Case Team*” dated 12 September 2018, slide 38.

²⁵¹ Replies to Phase II Questionnaire to Customers, q. 4.

²⁵² Replies to Phase II Questionnaire to Customers, q. 4 and replies to the Commission’s Phase II market reconstruction.

²⁵³ Replies to Q2 – Questionnaire to Customers, q. 38.

variable speed household refrigeration compressors that *"merger of 2 variable speed suppliers reduces the offering in the EEA market."*²⁵⁴

- (255) Some customers of household refrigeration compressors indicated that the number of their potential suppliers will be reduced with the risk of reductions of the competitive pressure.²⁵⁵
- (256) For some customers, the Parties are the only two suppliers or two major suppliers of variable speed compressors at the moment, in particular in the EEA, and therefore, for some customers, the Transaction may lead to a dependency on the merged entity for some time.²⁵⁶
- (257) While the prices of variable speed household refrigeration compressors have been decreasing over the last five years, an overwhelming majority of customers that responded to the Commission's market investigation expect the prices of variable speed household refrigeration compressors to increase or remain the same post-Transaction.²⁵⁷ In particular, certain OEMs expect a price increase. One customer of both household and light commercial refrigeration compressors explained: *"Nidec has invested to acquire Embraco. They will need to earn that money back. If the market is a bit constrained in supply of variable speed technology because of the increasing demand they will attempt to increase the prices at the same time as availability does not increase."*, and added in general terms: *"Unless of course the Asian competition is increasing volume offering."*²⁵⁸
- (258) Finally, with regard to variable speed household refrigeration compressors, a market participant submitted: *"Customers would not have a viable alternative to Nidec and Embraco with respect to variable speed household refrigeration compressors in the post-transaction scenario. The merged entity would hold a market share around [90-100]% (in value) and [90-100]% (in volume), while [the company] of only [0-5]% (in value) and [5-10]% (in volume). In addition, there is a huge technological gap between the variable speed household refrigeration compressors of Nidec and, in particular, Embraco, on the one hand, and [the company], on the other hand. The technical level of the variable speed household refrigeration compressors of Nidec and, in particular, Embraco is much more advanced as compared to that of [the company]. In addition, both Nidec and Embraco are important innovators on this market. Furthermore, they are currently launching new variable speed families: FMX for Embraco; new family based on Delta for Nidec. The level of substitutability between the products of the merged entity and those of [the company] would be limited in this context."*²⁵⁹

6.4.3. Conclusion

- (259) The Commission considers that the Transaction would be likely to significantly impede effective competition in the market for variable speed household refrigeration compressors in the EEA and also globally, where EEA is a differentiated segment, due to horizontal non-coordinated effects and/or due to the creation or strengthening of a dominant position.

²⁵⁴ Reply to Q2 – Questionnaire to Customers, q. 37 and q. 38.

²⁵⁵ Replies to Q2 – Questionnaire to Customers, q. 37.

²⁵⁶ Replies to Q2 – Questionnaire to Customers, q. 25, q. 25.1 and q. 37.

²⁵⁷ Replies to Q2 – Questionnaire to Customers, q. 40.

²⁵⁸ Reply to Q2 – Questionnaire to Customers, q. 40.1.

²⁵⁹ Reply to Q1 – Questionnaire to Competitors, q. 37.1.

6.5. Competitive assessment of fixed and variable speed light commercial refrigeration compressors

6.5.1. The Notifying Party's arguments

- (260) In Phase I, the Notifying Party argued that the Transaction does not give rise to competition concerns in light commercial refrigeration compressors. The Notifying Party argued that the merged entity would face significant competition from strong rivals, notably from Chinese players such as Changhong, Wanbao/ACC, Donper, Quianjiang and GMCC.²⁶⁰
- (261) Further, the merged entity would be constrained by suppliers of other types of refrigeration compressors, namely rotary and scroll compressors²⁶¹, which are typically used in applications which need higher displacement ranges, but are gradually moving into the space in which the Parties compete most directly.²⁶²
- (262) Finally, the Notifying Party argued that the merged entity would be constrained by strong, sophisticated, customers.²⁶³
- (263) However, in its Response to the Article 6(1)(c) decision, the Notifying Party did not challenge the Commission's assessment establishing serious doubts in both fixed and variable speed light commercial refrigeration compressors, in the EEA and globally.²⁶⁴

6.5.2. The Commission's assessment

6.5.2.1. Market shares

- (264) The market for light commercial refrigeration compressors is very concentrated, both at EEA and global level, and for fixed and variable speed (both separately and combined), as can be seen from the market share tables (Table 10 - Table 15), setting out market shares at EEA and global level, for fixed and variable speed. The market share figures are based on the Notifying Party's estimates.
- (265) Table 10 - Table 15 show that the global market for light commercial refrigeration compressors features a number of producers who are also active in the production of household refrigeration compressors, such as the Parties, together with producers such as Changhong (through its company Huayi/Cubigel), Donper, Panasonic and Wanbao/ACC. Tecumseh is however mainly active in light commercial refrigeration compressors.
- (266) As regards the EEA market, the market is even more concentrated. The Parties are the largest players, followed by Changhong, Tecumseh and, according to the Notifying Party's data, GMCC. Both Changhong and Tecumseh have manufacturing facilities for light commercial refrigeration compressors in the EEA, in Spain and France respectively.

²⁶⁰ Form CO, paragraphs 39, 467–494.

²⁶¹ The Parties refer to competitors such as Emerson producing scroll compressors and Panasonic and Samsung producing rotary compressors.

²⁶² Form CO, paragraph 124.

²⁶³ Form CO, paragraph 529.

²⁶⁴ Notifying Party's Response to the Article 6(1)(c) decision, paragraph 8.

Table 10: EEA market shares for light commercial refrigeration compressors (aggregate across fixed and variable speed), 2018²⁶⁵

Company	Volume share	Value share
Nidec	[20-30]%	[20-30]%
Embraco	[40-50]%	[50-60]%
<i>Combined</i>	<i>[70-80]%</i>	<i>[70-80]%</i>
Changhong	[5-10]%	[5-10]%
GMCC	[0-5]%	[0-5]%
Tecumseh	[5-10]%	[5-10]%
Others	[0-5]%	[0-5]%
Total	100.0%	100.0%
Market Size (in units and '000 USD)	4,558,998	261,891

Source: Notifying Party's estimates - Reply to RFI 22.

²⁶⁵

According to the Notifying Party's estimates, the combined entity's EEA value market shares for light commercial refrigeration compressors (aggregate across fixed and variable speed) in 2017 was [90-100]%. For 2016, the Notifying Party was not able to provide market share figures (see *Reply to RFI 6, Annex 2*).

Table 11: Worldwide market shares for light commercial refrigeration compressors (aggregate across fixed and variable speed), 2018²⁶⁶

Company	Volume share	Value share
Nidec	[10-20]%	[10-20]%
Embraco	[30-40]%	[40-50]%
<i>Combined</i>	<i>[40-50]%</i>	<i>[50-60]%</i>
Changhong	[10-20]%	[10-20]%
Donper	[5-10]%	[0-5]%
GMCC	[0-5]%	[0-5]%
KK	[0-5]%	[0-5]%
LG	[0-5]%	[0-5]%
Panasonic	[0-5]%	[0-5]%
Qianjiang	[0-5]%	[0-5]%
Siberia	[0-5]%	[0-5]%
Tecumseh	[5-10]%	[5-10]%
Wanbao/ACC	[0-5]%	[0-5]%
Zelt	[0-5]%	[0-5]%
Others	[10-20]%	[5-10]%
Total	100.0%	100.0%
Market Size (in units and '000 USD)	29,223,703	1,190,907

Source: Notifying Party's estimates - Reply to RFI 22.

²⁶⁶ According to the Notifying Party's estimates, the combined entity's worldwide value market shares for light commercial refrigeration compressors (aggregate across fixed and variable speed) in 2016 was [50-60]%, and in 2017 it was [60-70]% (see *Reply to RFI 6, Annex 2*).

Table 12: EEA market shares for fixed speed light commercial refrigeration compressors, 2018²⁶⁷

Company	Volume share	Value share
Nidec	[20-30]%	[20-30]%
Embraco	[40-50]%	[50-60]%
<i>Combined</i>	<i>[70-80]%</i>	<i>[70-80]%</i>
Changhong	[10-20]%	[5-10]%
GMCC	[0-5]%	[0-5]%
Tecumseh	[5-10]%	[10-20]%
Others	[0-5]%	[0-5]%
Market Size (in units and '000 USD)	4,275,443	230,454

Source: Notifying Party's estimates - Reply to RFI 22.

²⁶⁷

According to the Notifying Party's estimates, the combined entity's EEA value market shares for fixed speed light commercial refrigeration compressors in 2017 was [70-80]%. For 2016, the Notifying Party was not able to provide market share figures (see *Reply to RFI 6, Annex 2*).

Table 13: Worldwide market shares for fixed speed light commercial refrigeration compressors, 2018²⁶⁸

Company	Volume share	Value share
Nidec	[10-20]%	[10-20]%
Embraco	[30-40]%	[30-40]%
<i>Combined</i>	<i>[40-50]%</i>	<i>[50-60]%</i>
Changhong	[10-20]%	[10-20]%
Donper	[5-10]%	[0-5]%
GMCC	[0-5]%	[0-5]%
KK	[0-5]%	[0-5]%
LG	[0-5]%	[0-5]%
Panasonic	[0-5]%	[0-5]%
Qianjiang	[0-5]%	[0-5]%
Siberia	[0-5]%	[0-5]%
Tecumseh	[5-10]%	[5-10]%
Wanbao/ACC	[0-5]%	[0-5]%
Zelt	[0-5]%	[0-5]%
Others	[10-20]%	[5-10]%
Market Size (in units and '000 USD)	28,735,123	1,143,937

Source: Notifying Party's estimates - Reply to RFI 22.

Table 14: EEA market shares for variable speed light commercial refrigeration compressors, 2018²⁶⁹

Company	Volume share	Value share
Nidec	[30-40]%	[40-50]%
Embraco	[60-70]%	[50-60]%
<i>Combined</i>	<i>[90-100]%</i>	<i>[90-100]%</i>
Market Size (in units and '000 USD)	[200,000-300,000]	[30,000-40,000]

Source: Notifying Party's estimates - Reply to RFI 22.

²⁶⁸ According to the Notifying Party's estimates, the combined entity's worldwide value market shares for fixed speed light commercial refrigeration compressors in 2016 was [50-60]% and in 2017 was [50-60]% (see Reply to RFI 6, Annex 2).

²⁶⁹ According to the Notifying Party's estimates, the combined entity's EEA value market shares for variable speed light commercial refrigeration compressors in 2017 was [90-100]%. For 2016, the Notifying Party was not able to provide market share figures (see Reply to RFI 6, Annex 2).

Table 15: Worldwide market shares for variable speed light commercial refrigeration compressors, 2018²⁷⁰

Company	Volume share	Value share
Nidec	[30-40]%	[40-50]%
Embraco	[60-70]%	[50-60]%
<i>Combined</i>	<i>[90-100]%</i>	<i>[90-100]%</i>
Market Size (in units and '000 USD)	[400,000-500,000]	[40,000-50,000]

Source: Notifying Party's estimates - Reply to RFI 22.

- (267) As can be seen from Table 13, the merged entity would have a combined market share of [40-50]% (on the basis of volume) and [50-60]% (on the basis of value) globally, for fixed speed light commercial refrigeration compressors. It would be by far the global leader in fixed speed light commercial refrigeration compressors, and between [...] larger than the second global player, Changhong, which has a global market share of [10-20]% (on the basis of volume) or [10-20]% (on the basis of value) according to the Notifying Party's estimates.²⁷¹ The other global players are significantly smaller. [...].
- (268) At EEA level, the merged entity would be even stronger, with a combined market share of [70-80]% for fixed speed light commercial refrigeration compressors, on the basis of volume and [70-80]% on the basis of value, as set out in Table 12. The only other three players identified by the Notifying Party as being active in the EEA (namely Tecumseh, Changhong and GMCC) are significantly smaller. [...].
- (269) When looking at the Parties' market shares in variable speed light commercial refrigeration compressors (Table 14 and Table 15), the merged entity would become the monopolist, both worldwide and at EEA level.

6.5.2.2. The Parties are close competitors

- (270) The Commission's market investigation confirmed that, as might be suggested by their market shares, the Parties are close competitors in light commercial refrigeration compressors, in both fixed and variable speed, and in the EEA and globally.
- (271) In particular, customers indicated that Nidec and Embraco are the leading suppliers of light commercial refrigeration compressors.²⁷² Further, many light commercial refrigeration compressor customers, in particular in the EEA, source either exclusively, or predominantly, from Nidec and Embraco.²⁷³

²⁷⁰ According to the Notifying Party's estimates, the combined entity's worldwide value market shares for variable speed light commercial refrigeration compressors was [90-100]% in both 2016 and 2017.

²⁷¹ The Parties were not able to provide market share data for competitors' shares on the basis of fixed speed and variable speed light commercial compressors separately, but only on the basis of all light commercial compressors. The Commission's market reconstruction exercise largely confirmed the Parties' estimates.

²⁷² Replies to Q2 – Questionnaire to Customers, q. 47.

²⁷³ Replies to Q2 – Questionnaire to Customers, q. 42.

- (272) The Commission's market investigation also showed that the Parties compete closely, have a similar portfolio, and are the two leading producers when it comes to technology, innovation and range. During the Commission's market investigation, almost all respondent customers confirmed that the Parties were the two leading companies in terms of technological ability and capacity to innovate.²⁷⁴
- (273) In particular, while the variable speed light commercial market is small (accounting for only 2% of the volume of all light commercial refrigeration compressor sales globally²⁷⁵), it can be seen in Table 14 and Table 15 that the Parties are the two main players currently producing variable speed light commercial refrigeration compressors. The merger would result in a monopoly in this market both at EEA level and globally. The variable speed light commercial refrigeration compressors market is also expected to grow significantly over the next five years.²⁷⁶
- (274) For example, one European light commercial customer confirmed that the Parties were the only two able to supply variable speed refrigeration compressors: *"In fact for many applications Embraco and Nidec are the UNIQUE TWO COMPETITORS HOMOLOGATED, specially for variable speed compressor. For us to have both suppliers is strategic."*²⁷⁷
- (275) In addition, due to forthcoming bans of HFCs under Union regulation in this area,²⁷⁸ light commercial compressors, which are compatible with more environmentally-friendly types of HC refrigerant, such as R290, will become increasingly more important. This was one area highlighted in the Commission's market investigation, where customers indicated that there was limited competition from other players in the light commercial market, and in particular for models which were compatible with R290 refrigerant.²⁷⁹
- (276) For example, one customer highlighted the Parties' leading technology and the fact that the Parties were the only two suppliers able to supply the full range of R290 compressors: *"The competition between Nidec and Embraco is very important for our business. Both companies offer products of high quality and of high technical standards and they have the size to cover our requirements. Currently, Nidec and Embraco are the only two manufacturers of compressors who offer full range (all sizes) of compressors with R290 refrigerant for light commercial applications."*²⁸⁰
- (277) Respondent customers also noted that competitors were not able to supply light commercial refrigeration compressors compatible with R290 refrigerant, for example: *"R290 and R600/R404 applications/Compressors: Nidec and Embraco are relatively pair in technology and performance on R290. All others need significant development. On R600/R404 the performance of all players is very similar."*²⁸¹ This customer noted that there was more competition for compressors compatible with the R600/R404 refrigerants.

²⁷⁴ Replies to Q2 – Questionnaire to Customers, q. 50.

²⁷⁵ See Table 11 and Table 15.

²⁷⁶ Replies to Q2 – Questionnaire to Customers, q. 52.

²⁷⁷ Reply to Q2 – Questionnaire to Customers, q. 42.

²⁷⁸ For example, the use of R-134/404 will be banned under European legislation in new refrigeration cabinets from 1 January 2020. See Regulation (EU) No 517/2014 of the European Parliament and of the Council of 16 April 2014 on fluorinated greenhouse gases and repealing Regulation (EC) No 842/2006 Text with EEA relevance.

²⁷⁹ Replies to Q2 – Questionnaire to Customers, q. 50.

²⁸⁰ Reply to Q2 – Questionnaire to Customers, q. 42.

²⁸¹ Reply to Q2 – Questionnaire to Customers, q. 50.

- (278) Market participants in the Commission's market investigation raised concerns regarding the impact of the Transaction, due to the closeness of competition between the Parties pre-Transaction: "*Nidec bought the compressor manufacturer SECOP and they have been a direct competition to Embraco. We see a huge negative impact.*"²⁸² Indeed, a majority of customers considered that prices of light commercial refrigeration compressors would rise post-Transaction, and that these price rises would be higher for variable speed light commercial refrigeration compressors, where the Parties would have a monopoly.²⁸³
- (279) For example, one light commercial customer noted that: "*The fact this will be very critical situation, Embraco and Secop today are our two main competition for hermetic compressors, specially for variable speed. A merge will create a monopolistic market for light commercial applications, specially in EEA.*"²⁸⁴
- (280) Another light commercial customer noted that: "*Nidec has invested to acquire Embraco. They will need to earn that money back. If the market is a bit constrained in supply of variable speed technology because of the increasing demand a merger may give rise to increasing prices as availability does not increase. Unless of course the Asian competition is increasing volume offering.*"²⁸⁵ The Commission's views that the prospects of market entry in variable speed light commercial refrigeration compressors are limited, particularly in the EEA, are set out in Section 6.5.2.4.
- (281) The Parties' own internal documents also provide further evidence of the closeness of competition between Nidec and Embraco. For example, Nidec notes in one document that [...] ²⁸⁶ In another document, Nidec notes that in the EEA, [...] ²⁸⁷ [...] ²⁸⁸ [...].²⁸⁹
- (282) Moreover, Nidec [...].
- Figure 23 – [...]**
 [...]
 Source: [...].
- (283) Nidec's internal documents [...] ²⁹⁰

6.5.2.3. Limited competitive constraints from competitors

- (284) The Notifying Party argued that the merged entity would face extensive and significant competition from competitors such as Chinese and Asian players, US-based Tecumseh and vertically integrated Asian players such as LG, Panasonic and Samsung. The Notifying Party submitted a paper regarding the Chillventa Trade Fair, which took place in Nuremberg (Germany) during the course of the Phase I investigation, in order to further support their arguments. In particular, the Notifying Party argued that the vertically integrated players were targeting the light commercial refrigeration compressor market, namely that Hitachi had entered the light

²⁸² Reply to Q2 – Questionnaire to Customers, q. 42.
²⁸³ Replies to Q2 – Questionnaire to Customers, q. 59.
²⁸⁴ Reply to Q2 – Questionnaire to Customers, q. 56.
²⁸⁵ Reply to Q2 – Questionnaire to Customers, q. 58.
²⁸⁶ Nidec's internal document dated July 2018, Doc Id: 1511-70364 (NID00210838).
²⁸⁷ Nidec's internal document, Doc Id: 1511-075715 (NID00223276), slide 21.
²⁸⁸ Embraco's internal document, RFI 3 Annex 38(a)(6), slide 8.
²⁸⁹ Embraco's internal document, RFI 3 Annex 38(a)(6), slide 7.
²⁹⁰ Nidec's internal document, email from [...] to [...] dated [...], RFI 2 Annex 65.8.

commercial refrigeration compressor market and that Changhong and Tecumseh were also present.²⁹¹

- (285) However, the Commission's market investigation did not support the Notifying Party's argument that the merged entity would face strong competition in light commercial refrigeration compressors post-Transaction. The Commission contacted the Parties' global competitors in order to see whether these players would be entering, or significantly expanding, into the light commercial refrigeration compressor market in the next 3 – 5 years.²⁹²
- (286) In particular, as regards fixed speed light commercial refrigeration compressors, the Commission's market investigation confirmed that in the EEA, Changhong and Tecumseh are the only other two meaningful players currently capable of supplying customers in fixed speed light commercial refrigeration compressors.²⁹³ The Commission's market investigation did not reveal significant changes to this EEA position in the next three years.
- (287) There are however more competitors active globally. In addition to Changhong and Tecumseh, according to data submitted by the Notifying Party, Donper, Wanbao/ACC, Qianjiang, GMCC, Kulthorn Kirby, Siberia, Zelt, Panasonic and LG are also active at worldwide level (with shares ranging from 1 – 7% on the basis of volume and 0-8% on the basis of value). However, imports of these players into the EEA are very limited and are not sufficient to place any competitive constraint on the merged entity. Indeed, the combined sales of these companies into the EEA (according to the data submitted by the Notifying Party) was very low in 2018 (less than 4%).
- (288) The Parties' own internal documents also show that the main other two competitors in light commercial refrigeration compressors are Tecumseh and Changhong (Huayi/Cubigel), as these are the two competitors that are routinely tracked in strategy documents. [...].

Figure 24 – [...]

[...]

Source: [...].

- (289) [...].

Figure 25 – [...]

[...]

Source: [...].

- (290) However, there are indications from the Commission's market investigation that Changhong and Tecumseh's light commercial refrigeration compressors are not of the same quality, and do not have the same range as the Parties' light commercial refrigeration compressors, and that some customers do not consider their quality is adequate.²⁹⁴ For example, at least two major customers considered the quality of

²⁹¹ Paper regarding Chillventa Trade Fair, submitted on 24 October 2018.

²⁹² Responses to RFI to competitors – data request and Replies to Q1 – Questionnaire to Competitors, q. 44.

²⁹³ Replies to Q1 – Questionnaire to Competitors, Replies to Q2 – Questionnaire to Customers.

²⁹⁴ Replies to Q2 – Questionnaire to Customers, q. 44.

Tecumseh's light commercial refrigeration compressors to be inadequate and needing further development.²⁹⁵

(291) Customers that responded to the Commission's market investigation also indicated that there is a large gap between the Parties and Changhong and Tecumseh.²⁹⁶ One customer did not consider that Changhong and Tecumseh would be able to significantly improve their light commercial refrigeration compressor products in order to close this technological gap in the next few years.²⁹⁷

(292) [...] ²⁹⁸ [...].

(293) However, [...] ²⁹⁹ [...] ³⁰⁰ [...] ³⁰¹

Figure 26 – [...]

[...]

Source: [...].

(294) As regards possible alternative suppliers, one market participant noted that: *"As of now compressors of Chinese suppliers are not on the same quality and technical standard as Embraco or Nidec (SECOP) compressors are."* ³⁰²

(295) The Notifying Party argued that Donper is due to significantly increase its light commercial refrigeration compressor offering and will therefore be an effective competitive constraint. However, the Commission notes that this company is not present in the EEA, but rather is based in China and has a limited range of light commercial refrigeration compressors, with a 3% global market share based on value and 5% global market share based on volume. The vast majority of customers in the Commission's market investigation did not list Donper as a potential supplier. Therefore, the Commission considers that the competitive constraint likely to be exercised on the merged entity by Donper is significantly lower than the competitive constraint currently exercised by the Parties on each other.

(296) As regards the variable speed light commercial compressors market, the Parties are the only two players present in the EEA and globally, on the basis of their own market share data (see Table 14 and Table 15) and this is largely supported by the Commission's market investigation.

6.5.2.4. Market entry

(297) As noted at Section 6.4.2.6, in order for market 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.³⁰³ As regards the timeliness of entry, the Commission examines whether entry would be sufficiently swift and sustained to deter or defeat the exercise of market power. Entry is normally only considered timely if it occurs within two

²⁹⁵ Replies to Q2 – Questionnaire to Customers, q. 44.

²⁹⁶ Reply to Q2 – Questionnaire to Customers, q. 50.

²⁹⁷ Reply to Q2 – Questionnaire to Customers, q. 49.

²⁹⁸ Nidec's internal document dated July 2018, Doc ID 1511-70364 –(NID00210838).

²⁹⁹ Nidec's internal document, email from [...] to [...] dated [...], RFI 2 Annex 65.8.

³⁰⁰ Nidec's internal document dated June 2018, Doc Id 1511-075715 (NID00223276), slide 5.

³⁰¹ Form CO, paragraph 358 and Notifying Party's estimates of EEA market shares for light commercial refrigeration compressors (aggregate across fixed and variable speed)2018, reply to RFI 22.

³⁰² Reply to Q2 – Questionnaire to Customers, q. 45.

³⁰³ Horizontal Merger Guidelines, paragraph 68.

years.³⁰⁴ Moreover, entry must be of sufficient scope and magnitude to deter or defeat the anti-competitive effects of the merger in order to be considered.³⁰⁵

- (298) The majority of customers that responded to the Commission's market investigation said that they did not expect the market situation to change in the next three years. By way of example, one customer noted: "*I expect no big change in three years.*"³⁰⁶
- (299) As regards possible future purchases of light commercial refrigeration compressors from Chinese suppliers that did not have facilities in the EEA, a customer explained that "*it is possible but evaluation takes time*".³⁰⁷ While several customers did expect the Chinese players to enter the light commercial refrigeration compressor market overall, the Commission was not able to verify these statements as they were not supported by evidence. For example, customers did not refer to the successful outcome of testing of refrigeration compressors, nor named any particular company, but rather generally referred to "Chinese" players.³⁰⁸
- (300) As regards the views of competitors, at least one was sceptical about future entry into the EEA market for light commercial refrigeration compressors, due to the combined strength of the Parties.³⁰⁹ The Commission's market investigation did not therefore confirm the Notifying Party's arguments that the merged entity would be subject to significant competitive constraints from existing and future new suppliers in light commercial refrigeration compressors.
- (301) The Commission's market investigation also confirmed that new entry from competitors based outside the EEA and not currently active in the market was not expected in the near future.³¹⁰ In particular, customers confirmed that they have not tested any variable speed light commercial compressors with Chinese competitors with production facilities outside the EEA for variable speed light commercial refrigeration compressors.³¹¹
- (302) The Commission does not therefore consider that there would be timely, likely or sufficient entry to deter or defeat any anti-competitive effects of the merger.

6.5.3. Conclusion

- (303) The Commission considers that the Transaction would be likely to significantly impede effective competition in the markets for both fixed speed and variable speed light commercial refrigeration compressors in the EEA and globally, due to horizontal non-coordinated effects and/or due to the creation or the strengthening of a dominant position.

7. COMMITMENTS

- (304) On 23 January 2019, the Commission informed the Notifying Party of the preliminary concerns arising from the preliminary assessment of the Transaction during a State of Play meeting.

³⁰⁴ Horizontal Merger Guidelines, paragraph 74.

³⁰⁵ Horizontal Merger Guidelines, paragraph 75.

³⁰⁶ Reply to Q2 – Questionnaire to Customers, q. 45.

³⁰⁷ Reply to Q2 – Questionnaire to Customers, q. 45.

³⁰⁸ Replies to Q2 – Questionnaire to Customers. q.45

³⁰⁹ Reply to Q1 – Questionnaire to Competitors, q. 43.

³¹⁰ Responses to RFI to competitors – data request and Replies to Q1 – Questionnaire to Competitors, q. 44.

³¹¹ Replies to Q2 – Questionnaire to Customers, q. 46.

- (305) In order to render the Transaction compatible with the internal market in relation to the markets for variable speed household refrigeration compressors and both fixed and variable speed light commercial refrigeration compressors, on 7 February 2019 the Notifying Party formally submitted commitments pursuant to Article 8(2) of the Merger Regulation (the “First Commitments”).
- (306) The Commission market-tested the First Commitments on 11 February 2019. In order to address the issues raised in the market test, the Notifying Party submitted a final set of commitments on 28 February 2019 (the “Final Commitments”).

7.1. First Commitments

7.1.1. Description of the First Commitments

- (307) The First Commitments proposed by Nidec consisted of the divestment of Nidec's global refrigeration compressor business (formerly known as “SECOP”), with the exclusion of Nidec’s battery driven (mobile) compressor business (the “Divestment Business”).
- (308) The Divestment Business comprised of the following legal entities:
- (a) Nidec Global Appliance Austria GmbH, Fürstenfeld, Austria (“Nidec Austria”), including Nidec Austria’s manufacturing plant located at the same address (“Nidec Austria Plant”);
 - (b) Nidec Global Appliance Slovakia s.r.o., Zlaté Moravce, Slovak Republic, (“Nidec Slovakia”), including Nidec Slovakia’s manufacturing plant located at the same address (“Nidec Slovakia Plant”);
 - (c) Nidec Compressors (Tianjin) Co., Ltd., Tianjin, People’s Republic of China (“Nidec China”), including Nidec China’s manufacturing plant located at the same address (“Nidec China Plant”);
 - (d) Nidec Global Appliance Italy Srl, Moncalieri, Italy (“Nidec Italy”);
 - (e) Nidec Global Appliance Germany GmbH, Flensburg, Germany and Nidec Global Appliance Compressors GmbH, Mads-Clausen-Str. 7, 24939 Flensburg, Germany (“Nidec Germany”);
 - (f) Nidec Global Appliance USA Inc., Roswell, USA (“Nidec USA”).
- (309) The Divestment Business included:
- (a) Refrigeration compressor production lines to produce Nidec’s Delta Series, Kappa Series, D-Series, F-Series, G-Series, N-Series, S-Series, T-Series and X-Series refrigeration compressors (“Divestment Products”);
 - (b) All improvement projects regarding the Divestment Products and new refrigeration compressors that are currently in development by Nidec but are not yet sold on the market (“Pipeline Products”);
 - (c) The freehold title and the leasehold title to the site areas on which, respectively, the Nidec Austria Plant is located in Fürstenfeld, the Nidec Slovakia Plant is located in Zlaté Moravce and the Nidec China Plant is located in Tianjin;
 - (d) The leasehold titles to offices for Nidec Germany, Nidec Italy, and Nidec USA;
 - (e) All of the patents and know-how owned by Nidec used by the Divestment Business to develop, manufacture and sell the Divestment Products subject to a

non-exclusive license back to Nidec in relation to certain patents relevant to the battery-driven refrigeration compressors for use in mobile applications;

- (f) The Secop brand and any associated trademarks and product names;
 - (g) To the extent legally possible, all Nidec-held data and relevant product registration/authorisations, and documents related thereto (if any), for all models of the Divestment Products, including those that relate to plant or product upgrades, quality certificates and approvals pertaining to the Divestment Business;
 - (h) All contracts, agreements, leases, commitments and understandings relating to the Divestment Business, including supply contracts, customer relationships, IT agreements and licenses;
 - (i) All personnel currently working in Nidec Slovakia, Nidec Austria, Nidec China with the exclusion of personnel working on the battery-driven compressors business and motors for washing machines;
 - (j) [...] employees as Key Personnel including for the following functions: [...]
 - (k) Transitional service agreements, for a transitional period of up to one year, at cost, for the supply of IT services and for the supply of support services pertaining to the patents, know-how and other intellectual property rights used to develop, manufacture and sell the Divestment Products.
- (310) If there is any asset or personnel which was not included in the Divestment Business, but which was both used (exclusively or not) in the Divestment Business and necessary for the continued viability and competitiveness of the Divestment Business, Nidec committed to offer that asset or adequate substitute to potential purchasers.
- (311) The Divestment Business did not include:
- (a) Nidec's business, including all related employees, relating to battery-driven refrigeration compressors for use in mobile applications currently manufactured in the Nidec China plant, including the two production lines used exclusively to produce those compressors which would be moved on a timely basis to another Nidec plant; and
 - (b) Nidec's business, including all related employees, relating to motors for washing machines, dryers and dishwashers currently manufactured in the Nidec Austria Plant and Nidec Slovakia Plant, including the three production lines used to produce those motors which would be moved on a timely basis to another Nidec plant.
- (312) The Commission decided to test the First Commitments with market participants.
- 7.1.2. *Results of the market test*
- (313) The Commission launched a market test of the First Commitments on 11 February 2019.
- (314) The market test intended to assess whether the First Commitments were suitable to remove the preliminary concerns raised regarding variable speed household refrigeration compressors and light commercial refrigeration compressors, both fixed and variable speed.

- (315) The Commission reviewed all individual responses and its assessment of the market test was based on the totality of the replies, with a particular focus on the replies that expressed a substantiated opinion.
- (316) The majority of respondents expressing a view confirmed that the scope of the First Commitments would address the preliminary concerns in both variable speed household refrigeration compressors and both fixed and variable speed light commercial refrigeration compressors, by removing the overlaps and ensuring that an independent competitor is maintained in these markets.³¹² For example, one competitor noted that: *“To the best of our knowledge, the proposed Commitments will ensure that a number of viable competitors remain active in this segment both globally and in the EEA. On that basis, it will be sufficient to address the Commission’s concerns.”*³¹³
- (317) However, at the same time, concerns were raised regarding the ongoing viability and competitiveness of the Divestment Business. Respondents noted that this was linked to the identity of the purchaser and its willingness to invest and innovate, in particular in the variable speed household refrigeration business. For example, one customer noted that: *“It depends on the purchaser’s ability and willingness to continue development and introducing competitive variable speed household Refrigeration compressors into the market.”*³¹⁴
- (318) Market participants also linked the likelihood of ensuring that all three plants are kept open post-divestiture with the identity of the purchaser. They noted that the purchaser would need to make a strategic decision to keep producing both household and light commercial refrigeration compressors and invest into new products in order to justify production in all three plants.³¹⁵
- (319) In addition, a majority of respondents indicated that the purchaser of the Divestment Business should be already active in the market for the manufacture and supply of compressors.³¹⁶ Consequently, a purely financial investor would not be suitable. For example, one customer noted that: *“To support the business of refrigeration the Purchaser should be already in this business. Also to be able to follow the evolution of this Market that has some peculiarities. Differently than the air conditioning, the refrigeration require low volumes but high customization.”*³¹⁷ A competitor also highlighted that the purchaser should be in the same industry in order to benefit from synergies: *“Obviously must be active to get current synergies.”*³¹⁸
- (320) Another respondent noted that the purchaser should be active in the refrigeration industry, but did not necessarily have to be already active in the manufacture of compressors: *“It’s not necessarily in the market for the manufacture and supply of refrigeration compressors. But it shall be in refrigeration related business.”*³¹⁹
- (321) A financial investor may not have the necessary incentives to ensure the continued viability and competitiveness of the Divestment Business, by continuing to operate and invest in all three plants. For example, one private equity respondent that

³¹² Replies to Questionnaire on Phase II Commitments offered by Nidec, q. 2 and q. 3.

³¹³ Replies to Questionnaire on Phase II Commitments offered by Nidec, q. 2.

³¹⁴ Replies to Questionnaire on Phase II Commitments offered by Nidec, q. 4.

³¹⁵ Replies to Questionnaire on Phase II Commitments offered by Nidec, q.6.

³¹⁶ Replies to Questionnaire on Phase II Commitments offered by Nidec, q. 16.

³¹⁷ Replies to Questionnaire on Phase II Commitments offered by Nidec, q. 16.

³¹⁸ Replies to Questionnaire on Phase II Commitments offered by Nidec, q. 16.

³¹⁹ Replies to Questionnaire on Phase II Commitments offered by Nidec, q. 16.

expressed interest in the Divestment Business as a potential purchaser suggested that it would close the Austria plant, noting that it: *"It might make sense to eliminate Austria operation in effort to find cost synergies."*³²⁰ Another market respondent indicated that the previous ownership of SECOP by a private equity company had been a *"disaster"*.³²¹

- (322) As regards the particular characteristics that a potential purchaser should have in order to ensure that the Divestment Business is run viably, a number of market respondents noted the importance of an interest in innovation and launching innovative products and of having strong finances.³²² A knowledge of Union energy legislation, and a commitment to launching energy-saving products, were also considered important.³²³ A number of market respondents highlighted again the need for the purchaser to have a refrigeration industry background, with at least one respondent highlighting the need for a familiarisation with the household refrigeration appliances market. For example, respondents noted that the purchaser should be *"cash strong, willing to invest longer [sic.] term, willing to innovate"*,³²⁴ and *"the purchaser should have an industrial background and should know the household market and its requirements."*³²⁵
- (323) As regards Key Personnel, a number of market respondents highlighted the fact that Key Personnel with [...] background should also be included in the Divestment Business, as there were currently no employees with these functions included as Key Personnel.³²⁶ [...]³²⁷
- (324) Finally, only a limited number of respondents expressed interest in purchasing the Divestment Business. This consisted of three strategic players and two financial investors. As regards the strategic purchasers, only two of the three strategic players provided an explanation of their reasons for wishing to acquire the Divestment Business. Both of these interested players are manufacturers in the refrigeration industry. The third strategic player is an appliance manufacturer. In addition to the strategic purchasers, two financial investors replied that they might be interested in purchasing the Divestment Business, but would need to evaluate the opportunity first.³²⁸

7.1.3. *General principles for the assessment of commitments*

- (325) The following principles from the Remedies Notice³²⁹ apply where parties to a merger choose to offer commitments in order to restore effective competition.
- (326) Where a concentration raises competition concerns in that it could significantly impede effective competition, in particular as a result of the creation or strengthening

³²⁰ Replies to Questionnaire on Phase II Commitments offered by Nidec, q. 6.

³²¹ Replies to Questionnaire on Phase II Commitments offered by Nidec, q. 7.

³²² Replies to Questionnaire on Phase II Commitments offered by Nidec, q. 17.

³²³ Replies to Questionnaire on Phase II Commitments offered by Nidec, q. 17.

³²⁴ Replies to Questionnaire on Phase II Commitments offered by Nidec, q. 17.

³²⁵ Replies to Questionnaire on Phase II Commitments offered by Nidec, q. 17.

³²⁶ Replies to Questionnaire on Phase II Commitments offered by Nidec, q. 11.

³²⁷ Replies to Questionnaire on Phase II Commitments offered by Nidec, q. 11.

³²⁸ Replies to Questionnaire on Phase II Commitments offered by Nidec, q. 19.

³²⁹ Commission's Notice on Remedies acceptable under Council Regulation (EC) No 139/2004 and under Commission Regulation (EC) No 802/2004 ("Remedies Notice"), OJ C 267, 22.10.2008, p. 1.

of a dominant position, the parties may seek to modify the concentration in order to resolve the competition concerns and thereby gain clearance of their merger.³³⁰

- (327) The Commission only has power to accept commitments that are capable of rendering the concentration compatible with the internal market in that they will prevent a significant impediment to effective competition in all relevant markets where competition concerns were identified.³³¹ To that end, the commitments have to eliminate the competition concerns entirely³³² and have to be comprehensive and effective from all points of view.³³³
- (328) In assessing whether proposed commitments are likely to eliminate its competition concerns, the Commission considers all relevant factors including, *inter alia*, the type, scale and scope of the commitments, judged by reference to the structure and particular characteristics of the market in which those concerns arise, including the position of the parties and other participants on the market.³³⁴ Moreover, commitments must be capable of being implemented effectively within a short period of time.³³⁵
- (329) Where a proposed concentration threatens to significantly impede effective competition the most effective way to maintain effective competition, apart from prohibition, is to create the conditions for the emergence of a new competitive entity or for the strengthening of existing competitors via divestiture by the merging parties.³³⁶
- (330) The divested activities must consist of a viable business that, if operated by a suitable purchaser, can compete effectively with the merged entity on a lasting basis and that is divested as a going concern. The business must include all the assets which contribute to its current operation or which are necessary to ensure its viability and competitiveness and all personnel which are currently employed or which are necessary to ensure the business' viability and competitiveness.³³⁷
- (331) Normally, a viable business is a business that can operate on a stand-alone-basis, which means independently of the merging parties as regards the supply of input materials or other forms of cooperation other than during a transitory period.³³⁸

7.1.4. Commission's assessment of the First Commitments

- (332) The Commission noted that the First Commitments would remove the full overlap of the Parties' activities in the markets for variable speed household refrigeration compressors, as well as in variable and fixed speed light commercial refrigeration

³³⁰ Remedies Notice, paragraph 5.

³³¹ Remedies Notice, paragraph 9.

³³² Case C-202/06 P *Cementbouw Handel & Industrie v Commission* [2007] ECR 2007 I-12129, paragraph 54: "*it is necessary, when reviewing the proportionality of conditions or obligations which the Commission may, by virtue of Article 8(2) of Regulation No 4064/89, impose on the parties to a concentration, not to determine whether the concentration still has a Community dimension after those conditions or obligations have been complied with, but to be satisfied that those conditions and those obligations are proportionate to and would entirely eliminate the competition problem that has been identified*".

³³³ Remedies Notice, paragraphs 9 and 61.

³³⁴ Remedies Notice, paragraph 12.

³³⁵ Remedies Notice, paragraph 9.

³³⁶ Remedies Notice, paragraph 22.

³³⁷ Remedies Notice, paragraphs 23-25.

³³⁸ Remedies Notice, paragraph 32.

compressors. Respondents to the Commission's market test accordingly deemed the scope of the First Commitments to be sufficient to address the Commission's preliminary concerns.³³⁹

- (333) However, market feedback indicated that the viability and competitiveness of the Divestment Business strongly depended on the identity of the purchaser and its willingness to invest and innovate, in particular in the variable speed household refrigeration compressor business. For example, one customer noted that: *"It depends on the purchaser's ability and willingness to continue development and introducing competitive variable speed household Refrigeration compressors into the market."*³⁴⁰
- (334) To assess the viability and competitiveness of the Divestment Business, the Commission carried out a review of Nidec's financial data. In particular, Nidec's pro-forma P&Ls for the Austrian, Slovak and Chinese plants, from 2017 until 2021 divided by business division (that is to say, household, light commercial and battery-driven compressors and "WET", motors for washing machines and dishwashers).
- (335) In this respect, the Commission found that while the Divestment Business as a whole is profitable, [...].
- (336) [Discussion of financial results of and outlook for the Divestment Business].
- (337) In this context, the Commission noted that Nidec had started a comprehensive programme to revamp the competitiveness of its European refrigeration compressor production sites, which comprised of cost reduction plans for existing product lines, and also the development of new products.³⁴¹ The cost reductions visible in the pro-forma P&L analysis provided by Nidec appears to be attributable to the substantial CAPEX investments [...] that Nidec is planning to undertake [...].
- (338) Overall, the Commission found that Nidec's planned investments (totalling EUR [...])³⁴² were crucial for the viability and the competitiveness of the Austrian and the Slovak plants going forward.

Table 16: [...]

[...]

Source: Commission's computations of the Notifying Party's Reply to RFI 23, Annex 6(a).

- (339) In the Commission's view, there was a real risk that the Divestment Business would not be viable and competitive going forward if the investments in cost reduction and product development planned under Nidec's ownership would not be continued. In light of the poor financial performance of the Austrian plant, there was an acute risk that an acquirer who may be motivated by short-term profit considerations, without a strategic vision and the willingness to continue Nidec's investment plan, would close that site. In this context, the Commission noted that one of the financial investors who expressed a preliminary interest in the Divestment Business contemplated this option.³⁴³
- (340) In this context, the Commission also noted that in the case at hand it was not sufficient that the Divestment Business as a whole was profitable in order to ensure

³³⁹ Replies to Questionnaire on Phase II Commitments offered by Nidec, q. 2 and q. 3.

³⁴⁰ Replies to Questionnaire on Phase II Commitments offered by Nidec, q. 4.

³⁴¹ See Nidec's response to RFI 23 dated 6 February 2019.

³⁴² See Reply to RFI 23, Annex 6b; Reply to follow-up questions to RFI 23 of 4 February 2019, q. 6.d.

³⁴³ Replies to Questionnaire on Phase II Commitments offered by Nidec, q. 6.

its viability and competitiveness. This is because production is not homogenous across the different production sites, with each site dedicated to a different mix of products. Namely: China, light commercial refrigeration compressors; Slovakia, light commercial and certain variable speed household refrigeration compressors; and Austria, light commercial, fixed speed household and future variable speed household refrigeration compressors. Given that the Commission found competition concerns in the markets for variable speed household refrigeration compressors, as well as fixed and variable speed light commercial refrigeration compressors, it was necessary that not only as a whole, but also the individual production sites that made up the Divestment Business were viable and competitive. Put differently, if a possible purchaser would simply close down the Austrian production site, which under Nidec's ownership was foreseen to become the main production site for the future variable speed household refrigeration compressor model (Delta VSD), the Divestment Business would fail to address the Commission's concerns in the market for variable speed household refrigeration compressors.

- (341) The Commission found that the exclusion of the Nidec's battery-driven refrigeration compressors business for use in mobile applications (currently manufactured in the Nidec China plant) would not affect the viability of the China plant, because the China plant was already profitable even without this business.³⁴⁴ A large majority of respondents to the market test also considered that the removal of the battery-driven business from the China plant would not affect the viability of the plant.³⁴⁵
- (342) The Commission similarly found that the exclusion of Nidec's business, relating to motors for washing machines, dryers and dishwashers (currently manufactured in the Nidec Austria Plant and Nidec Slovakia Plant) would not have a sizeable impact on the viability of these plants. This is because the production lines currently located in the Austria and Slovakia plants were only recently located to the plants and were not yet profitable or only marginally profitable.³⁴⁶ In addition, respondents to the market test did not consider that this exclusion would affect the viability of the Austria and Slovakia plants.³⁴⁷
- (343) Moreover, the Commission noted that several respondents to the market test indicated that the purchaser of the Divestment Business should be active in the manufacture and supply of refrigeration compressors. Other respondents indicated that the purchaser should have experience in the refrigeration industry, i.e. not necessarily active in the manufacture and supply of refrigeration compressors, but could be active in a related activity. In light of the importance that market participants placed on relevant industry experience, the Commission considered that a financial investor motivated only by short term profit considerations would not be a suitable purchaser to maintain and develop the Divestment Business as a competitive force. Two financial investors replied in the market test that they might be interested in purchasing the Divestment Business, but would need to evaluate the opportunity first, and so did not substantiate their interest. Further, the Commission noted that one of these two financial investors who expressed a preliminary interest in the Divestment Business contemplated closing the Austria plant in order to find "cost

³⁴⁴ Reply to RFI 23, Annex 6a, and Reply to follow-up questions to RFI 23 of 4 February 2019, Annex 6.

³⁴⁵ Replies to Questionnaire on Phase II Commitments offered by Nidec, q. 9.

³⁴⁶ Reply to follow-up questions to RFI 23 of 14 February 2019, Annex 1 (file name "01 - Nidec Austria and Slovakia P&L with WET.pdf").

³⁴⁷ Replies to Questionnaire on Phase II Commitments offered by Nidec, q. 8

*synergies*³⁴⁸ in the response to the market test. This response illustrates a short-term view and did not indicate a willingness to pursue long-term investment perspective.

- (344) In response to its market test, there were only two credible players (which had a refrigeration industry background), that expressed an interest in purchasing the Divestment Business. As regards the third strategic player, on the basis that they did not provide any explanation for expressing an interest in the Divestment Business, the Commission does not consider their interest to be credible.
- (345) The Commission noted that, on the basis of this limited interest, there was a risk that a suitable purchaser may not be found, leaving the sale of the Divestment Business in doubt. The burden is on the Notifying Party to remove such uncertainties.³⁴⁹ The Commission therefore considered that the Commitments should include an "up-front buyer" clause, so that the Notifying Party may not close the Transaction until the Commission has approved the proposed purchaser of the Divestment Business. The First Commitments did not contain such a clause.
- (346) Finally, as regards Key Personnel, several respondents indicated that [...] should be included as Key Personnel³⁵⁰ as no Key Personnel covering these functions appeared to be included. [...].³⁵¹ The Commission noted that several key functions appear to be missing from the Key Personnel in the First Commitments, including [...].
- (347) The Commission concluded that the First Commitments were not sufficient to eliminate the Commission's preliminary concerns as to the compatibility of the Transaction with the internal market and with the functioning of the EEA Agreement.

7.2. The Final Commitments

7.2.1. Description of the Final Commitments

- (348) In light of the issues described at Section 7.1.4, the Notifying Party submitted revised commitments, the Final Commitments, on 28 February 2019.
- (349) The Final Commitments include a number of improvements to the First Commitments.
- (350) First, Nidec commits to make available to the purchaser CAPEX funding of the amount of EUR [...] for the purpose of improving the competitiveness and development of compressors produced in the Nidec Austria Plant and Nidec Slovakia Plant. This amount is equal to the CAPEX funding that Nidec would have committed to the two plants absent the divestment, [...].
- (351) [...].
- (352) [...].
- (353) [...].

Table 17: [...]

[...]

Source: [...].

³⁴⁸ Replies to Questionnaire on Phase II Commitments offered by Nidec, q. 6.

³⁴⁹ Remedies Notice, paragraph 11.

³⁵⁰ Replies to Questionnaire on Phase II Commitments offered by Nidec, q. 11.

³⁵¹ Replies to Questionnaire on Phase II Commitments offered by Nidec, q. 11.

- (354) [...].
- (355) Second, an additional purchaser criterion has been inserted in the Final Commitments. The purchaser: *“shall either be an industry participant with experience in the refrigeration business or an investor with a proven long-term perspective, successfully growing and developing its acquired companies, as well as having relevant expertise in the European manufacturing sector.”*³⁵²
- (356) Third, an additional [...] employees have been made Key Personnel, [...]
- (357) Fourth, the Final Commitments include an "up-front buyer" clause, so that the Notifying Party may not close the Transaction until the Commission has approved the proposed purchaser of the Divestment Business.
- 7.2.2. *Commission’s assessment of the Final Commitments*
- (358) The Commission notes that the Notifying Party has committed to make available to the purchaser CAPEX funding of the amount of EUR [...] for the purpose of improving the competitiveness and development of compressors produced in the Nidec Austria Plant and Nidec Slovakia Plant. The CAPEX funding is equal to the investment that Nidec would have made absent the divestment.
- (359) The Commission considers that the CAPEX funding contained in the Final Commitments ensures the viability and competitiveness of the Austrian and Slovak plants going forwards. [...].
- (360) [...].
- (361) The updated purchaser criteria contained in the Final Commitments require the proposed purchaser to either be an industry participant with experience in the refrigeration business, or an *“investor with a proven long-term perspective, successfully growing and developing its acquired companies, as well as having relevant expertise in the European manufacturing sector.”*
- (362) As regards the first part of the criterion, the Commission considers that this addresses concerns raised in the market test that the proposed purchaser should have relevant industry experience. The criterion does not limit the purchaser to being active in the manufacture and supply of refrigeration compressors. The Commission considers that further restricting the criterion in this way was not needed, on the basis that a number of respondents in the market test indicated that experience in the refrigeration industry could be sufficient.³⁵³
- (363) As regards the second part of the criterion, this allows a financial investor to qualify as a proposed purchaser, but only if it can demonstrate both a proven long term perspective having successfully grown and developed its acquired companies, and relevant expertise in the European manufacturing sector. The Commission notes that if a financial investor can prove a long term perspective and expertise in manufacturing, it may be considered a suitable purchaser. This is because following the amendments to the First Commitments (as contained in the Final Commitments), the Commission considers that the Divestment Business is a viable, competitive business capable of operating on a stand-alone basis. Consequently, the Commission does not consider it appropriate to exclude financial investors as potential purchasers, provided that they are investors that show a proven long-term perspective.

³⁵² Final Commitments, paragraph 19(c).

³⁵³ Replies to Questionnaire on Phase II Commitments offered by Nidec, q. 16.

- (364) Further, this criterion clearly excludes a financial investor motivated only by short term profit considerations, which would not be a suitable purchaser to maintain and develop the Divestment Business as a competitive force.
- (365) The Commission considers that the additional Key Personnel address the concerns raised in the market test regarding a number of missing functions, [...].
- (366) The Commission further considers that the "up-front buyer" clause included in the Final Commitments is important to guarantee with the requisite degree of certainty that the Divestment Business will be effectively divested to a suitable purchaser.
- (367) The Commission considers that the Final Commitments are likely to create a viable Divestment Business capable of competing effectively on a lasting basis in the relevant markets. The Commission therefore concludes that the Final Commitments are adequate and sufficient to eliminate the significant impediment to effective competition in relation to the markets for variable speed household refrigeration compressors and fixed and variable speed light commercial refrigeration compressors in the EEA and globally.

8. CONDITIONS AND OBLIGATIONS

- (368) Pursuant to the second subparagraph of Article 8(2) of the Merger Regulation, the Commission may attach to its decision conditions and obligations intended to ensure that the undertakings concerned comply with the commitments they have entered into vis-à-vis the Commission with a view to rendering the concentration compatible with the internal market.
- (369) The fulfilment of the measure that gives rise to the structural change of the market is a condition, whereas the implementing steps which are necessary to achieve this result are generally obligations on the parties. Where a condition is not fulfilled, the Commission's decision declaring the concentration compatible with the internal market is no longer applicable. Where the undertakings concerned commit a breach of an obligation, the Commission may revoke the clearance decision in accordance with Article 8(6) of the Merger Regulation. The undertakings concerned may also be subject to fines and periodic penalty payments under Articles 14(2) and 15(1) of the Merger Regulation.
- (370) In accordance with the basic distinction described in Recital (369) as regards conditions and obligations, this Decision should be made conditional on the full compliance by the Notifying Party with the Section B (including the Schedule) of the Final Commitments submitted by the Notifying Party on 28.02.2019 and all other Sections should be obligations within the meaning of Article 8(2) of the Merger Regulation. The full text of the commitments is attached as an Annex to this Decision and forms an integral part thereof.

HAS ADOPTED THIS DECISION:

Article 1

The notified operation whereby Nidec acquires sole control of Embraco within the meaning of Article 3(1)(b) of the Merger Regulation is hereby declared compatible with the internal market and the EEA Agreement.

Article 2

Article 1 is subject to compliance by Nidec with the conditions set out in Section B of Annex 1.

Article 3

Nidec shall comply with the obligations set out in the remaining sections of Annex 1 not referred to in Article 2.

Article 4

This Decision is addressed to:

Nidec Corporation

338 Kuzetonoshiro-cho,
Minami-ku, Kyoto – 601-8205
Japan

Done at Brussels, 12.4.2019

For the Commission

(Signed)
Margrethe VESTAGER
Member of the Commission

Case COMP/M.8947 – NIDEC / WHIRLPOOL (EMBRACO BUSINESS)
COMMITMENTS TO THE EUROPEAN COMMISSION

28 February 2019

Pursuant to Articles 8(2) and 10(2) of Council Regulation (EC) No 139/2004 (the “**Merger Regulation**”), Nidec Corporation (“**Nidec**” or the “**Notifying Party**”) hereby enters into the following Commitments (the “**Commitments**”) vis-à-vis the European Commission (the “**Commission**”) with a view to rendering the acquisition by Nidec of the compressor manufacturing business of Whirlpool Corporation (the “**Concentration**”) compatible with the internal market and the functioning of the EEA Agreement.

This text shall be interpreted in light of the Commission’s decision pursuant to Article 8(2) of the Merger Regulation to declare the Concentration compatible with the internal market and the functioning of the EEA Agreement (the “**Decision**”), in the general framework of European Union law, in particular in light of the Merger Regulation, and by reference to the Commission Notice on remedies acceptable under Council Regulation (EC) No 139/2004 and under Commission Regulation (EC) No 802/2004 (the “**Remedies Notice**”).

Section A - Definitions

1. For the purpose of the Commitments, the following terms shall have the following meaning:

Affiliated Undertakings: undertakings controlled by the Parties and/or by the ultimate parents of the Parties, whereby the notion of control shall be interpreted pursuant to Article 3 of the Merger Regulation and in light of the Commission Consolidated Jurisdictional Notice under Council Regulation (EC) No 139/2004 on the control of concentrations between undertakings (the “**Consolidated Jurisdictional Notice**”).

Assets: the assets that contribute to the current operation or are necessary to ensure the viability and competitiveness of the Divestment Business as indicated in Section B, paragraph 6 and described more in detail in the Schedule.

Closing: the transfer of the legal title to the Divestment Business to the Purchaser.

Closing Period: the period of [...] from the approval of the Purchaser and the terms of sale by the Commission.

Confidential Information: any business secrets, know-how, commercial information, or any other information of a proprietary nature that is not in the public domain.

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Conflict of Interest: any conflict of interest that impairs the Trustee's objectivity and independence in discharging its duties under the Commitments.

Divestment Business: the business or businesses as defined in Section B and in the Schedule which the Notifying Party commits to divest.

Divestment Products: Nidec's Delta Series, Kappa Series, D-Series, F-Series, G-Series, N-Series, S-Series, T-Series and X-Series Refrigeration Compressors, and all pipeline projects related to these Refrigeration Compressor platforms.

Divestiture Trustee: one or more natural or legal person(s) who is/are approved by the Commission and appointed by Nidec and who has/have received from Nidec the exclusive Trustee Mandate to sell the Divestment Business to a Purchaser at no minimum price.

Effective Date: the date of adoption of the Decision.

First Divestiture Period: the period of [...] from the Effective Date.

Hold Separate Manager: the person appointed by Nidec for the Divestment Business to manage the day-to-day business under the supervision of the Monitoring Trustee.

Key Personnel: all personnel necessary to maintain the viability and competitiveness of the Divestment Business, as listed in the Schedule, including the Hold Separate Manager.

Monitoring Trustee: one or more natural or legal person(s) who is/are approved by the Commission and appointed by Nidec, and who has/have the duty to monitor Nidec's compliance with the conditions and obligations attached to the Decision.

Nidec: Nidec Corporation, incorporated under the laws of Japan, with its registered office at 338 Kuzetonoshiro-cho, Minami-ku, Kyoto 601-8205, Japan, central registration system number 1300-01-002387.

Nidec Austria: Nidec Global Appliance Austria GmbH, incorporated under the laws of Austria, with its registered office at Jahnstraße 30, 8280 Fürstenfeld, Austria.

Nidec Austria Plant: Nidec Austria's Refrigeration Compressor manufacturing plant located at Jahnstraße 30, 8280 Fürstenfeld, Austria.

Nidec China: Nidec Compressors (Tianjin) Co., Ltd., incorporated in the People's Republic of China, with its registered office at Wuqing Development Zone, No. 27, Kai Yuan Road, 301700 Tianjin, People's Republic of China.

Nidec China Plant: Nidec China's Refrigeration Compressor manufacturing plant located at Wuqing Development Zone, No. 27, Kai Yuan Road, 301700 Tianjin, People's Republic of China.

Nidec Germany: Nidec Global Appliance Germany GmbH and Nidec Global Appliance Compressors GmbH, both Mads-Clausen-Str. 7, 24939 Flensburg, Germany.

Nidec Italy: Nidec Global Appliance Italy Srl, Piazza Vittorio Emanuele II, n°3 10024 Moncalieri, Italy.

Nidec Slovakia: Nidec Global Appliance Slovakia s.r.o., incorporated under the laws of the Slovak Republic, with its registered office at Tovàrenská 49, 953 01 Zlaté Moravce, Slovak Republic, with identity number 35 800 399, and registered with the Commercial Register of the District Court Nitra, section: Sro, under file No. 13235/N.

Nidec Slovakia Plant: Nidec Slovakia's Refrigeration Compressor manufacturing plant located at Tovàrenská 49, 953 01 Zlaté Moravce, Slovak Republic.

Nidec USA: Nidec Global Appliance USA Inc., 4000 Northfield Way, Suite 600 Roswell, GA 30076.

Parties: the Notifying Party and the undertaking that is the target of the concentration.

Personnel: all staff currently employed by the Divestment Business, including staff seconded to the Divestment Business.

Purchaser: the entity approved by the Commission as acquirer of the Divestment Business in accordance with the criteria set out in Section D.

Purchaser Criteria: the criteria laid down in paragraph 19 of these Commitments that the Purchaser must fulfil in order to be approved by the Commission.

Refrigeration Compressors: electro-mechanical devices, for household or light commercial applications, used to lower the temperature of an enclosed space (such as a freezer or refrigerator) by compressing vaporised refrigerant to remove heat from that space and transfer it elsewhere.

Schedule: the schedule to these Commitments describing more in detail the Divestment Business.

Trustee(s): the Monitoring Trustee and/or the Divestiture Trustee as the case may be.

Trustee Divestiture Period: the period of [...] from the end of the First Divestiture Period.

Section B - The commitment to divest and the Divestment Business

2.1 Commitment to divest

2. In order to maintain effective competition, Nidec commits to divest, or procure the divestiture of the Divestment Business by the end of the Trustee Divestiture Period as a going concern to a purchaser and on terms of sale approved by the Commission in accordance with the procedure described in paragraph 20 of these Commitments. To carry out the divestiture, Nidec commits to find a purchaser and to enter into a final binding sale and purchase agreement for the sale of the Divestment Business within the First Divestiture Period. If Nidec has not entered into such an agreement at the end of the First Divestiture Period, Nidec shall grant the Divestiture Trustee an exclusive mandate to sell the Divestment Business in accordance with the procedure described in paragraph 32 in the Trustee Divestiture Period.

3. The proposed concentration shall not be implemented before Nidec or the Divestiture Trustee has entered into a final binding sale and purchase agreement for the sale of the Divestment Business and the Commission has approved the purchaser and the terms of sale in accordance with paragraph 20.
4. Nidec shall be deemed to have complied with this commitment if:
 - (a) by the end of the Trustee Divestiture Period, Nidec or the Divestiture Trustee has entered into a final binding sale and purchase agreement and the Commission approves the proposed purchaser and the terms of sale as being consistent with the Commitments in accordance with the procedure described in paragraph 20; and
 - (b) the Closing of the sale of the Divestment Business to the Purchaser takes place within the Closing Period.
5. In order to maintain the structural effect of the Commitments, the Notifying Party shall, for a period of 10 years after Closing, not acquire, whether directly or indirectly, the possibility of exercising influence (as defined in paragraph 43 of the Remedies Notice, footnote 3) over the whole or part of the Divestment Business, unless, following the submission of a reasoned request from the Notifying Party showing good cause and accompanied by a report from the Monitoring Trustee (as provided in paragraph 46 of these Commitments), the Commission finds that the structure of the market has changed to such an extent that the absence of influence over the Divestment Business is no longer necessary to render the proposed concentration compatible with the internal market.

2.2 Structure and definition of the Divestment Business

6. The Commitments offered consist of the divestiture of Nidec's entire Light Commercial and Household Compressor business units, consisting of Refrigeration Compressors produced in Nidec's Austria, Slovakia and China plants and support functions in additional locations:
 - (a) Nidec Global Appliance Austria GmbH, Jahnstraße 30, 8280 Fürstenfeld, Austria ("**Nidec Austria**"), including Nidec's manufacturing plant located at the same address ("**Nidec Austria Plant**");
 - (b) Nidec Global Appliance Slovakia s.r.o., Tovàrenská 49, 953 01 Zlaté Moravce, Slovak Republic, with identity number 35 800 399, and registered with the Commercial Register of the District Court Nitra, section: Sro, under file No. 13235/N) ("**Nidec Slovakia**"), including Nidec Slovakia's manufacturing plant located in Zlaté Moravce ("**Nidec Slovakia Plant**");
 - (c) Nidec Compressors (Tianjin) Co., Ltd., Wuqing Development Zone, No. 27, Kai Yuan Road, 301700 Tianjin, People's Republic of China ("**Nidec China**"), including Nidec China's manufacturing plant located at the same address ("**Nidec China Plant**");
 - (d) Nidec Global Appliance Italy Srl, Piazza Vittorio Emanuele II, n°3 10024 Moncalieri, Italy ("**Nidec Italy**");

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- (e) Nidec Global Appliance Germany GmbH, Mads-Clausen-Str. 7, 24939 Flensburg, Germany;
 - (f) Nidec Global Appliance Compressors GmbH, Mads-Clausen-Str. 7, 24939 Flensburg, Germany (together with Nidec Global Appliance Germany GmbH, “**Nidec Germany**”);
 - (g) Nidec Global Appliance USA Inc., 4000 Northfield Way, Suite 600 Roswell, GA 30076 (“**Nidec USA**”).
7. The legal entities identified in paragraph 6 (a)-(g), together with associated assets, contracts, customer records, IP & knowhow, personnel and other interests, except the employees and businesses described in paragraph 4 of the Schedule, constitute the “**Divestment Business**”. The Nidec Austria Plant, the Nidec Slovakia Plant and the Nidec China Plant include the Refrigeration Compressor production lines to produce Nidec’s Delta Series, Kappa Series, D-Series, F-Series, G-Series, N-Series, S-Series, T-Series and X-Series Refrigeration Compressors, and all pipeline projects related to these Refrigeration Compressor platforms (“**Divestment Products**”). Nidec Germany, Nidec Italy and Nidec USA do not have manufacturing facilities, but include personnel who perform administrative services, such as sales and R&D for the Divestment Business.
8. The legal and functional structure of the Divestment Business as operated to date is described in the Schedule. The Divestment Business, described in more detail in the Schedule, includes all assets and staff that contribute to the current operation or are necessary to ensure the viability and competitiveness of the Divestment Business, in particular:
- (a) all tangible and intangible assets (including intellectual property rights);
 - (b) all licences, permits and authorisations issued by any governmental organisation for the benefit of the Divestment Business;
 - (c) all contracts, leases, commitments and customer orders of the Divestment Business, as well as all customer, credit and other records of the Divestment Business; and
 - (d) the Personnel.
9. In addition, the Divestment Business includes the benefit, for a transitional period of [...] after Closing and on terms and conditions equivalent to those at present afforded to the Divestment Business, of all current arrangements under which Nidec or its Affiliated Undertakings supply IT services to the Divestment Business, as detailed in the Schedule, unless otherwise agreed with the Purchaser. Strict firewall procedures will be adopted so as to ensure that any competitively sensitive information related to, or arising from such supply arrangements (for example, product roadmaps) will not be shared with, or passed on to, anyone outside the relevant operations.

Section C - Related commitments

3.1 Preservation of viability, marketability and competitiveness

10. From the Effective Date until Closing, the Notifying Party shall preserve or procure the preservation of the economic viability, marketability and competitiveness of the Divestment Business, in accordance with good business practice, and shall minimise as far as possible any risk of loss of competitive potential of the Divestment Business. In particular, Nidec undertakes:
- (a) not to carry out any action that might have a significant adverse impact on the value, management or competitiveness of the Divestment Business or that might alter the nature and scope of activity, or the industrial or commercial strategy or the investment policy of the Divestment Business;
 - (b) to make available, or procure to make available, sufficient resources for the development of the Divestment Business, on the basis and continuation of the existing business plans;
 - (c) to take all reasonable steps, or procure that all reasonable steps are being taken, including appropriate incentive schemes (based on industry practice), to encourage all Key Personnel to remain with the Divestment Business, and not to solicit or move any Personnel to Nidec's remaining business. Where, nevertheless, individual members of the Key Personnel exceptionally leave the Divestment Business, Nidec shall provide a reasoned proposal to replace the person or persons concerned to the Commission and the Monitoring Trustee. Nidec must be able to demonstrate to the Commission that the replacement is well suited to carry out the functions exercised by those individual members of the Key Personnel. The replacement shall take place under the supervision of the Monitoring Trustee, who shall report to the Commission;
 - (d) Nidec commits to make available to the Purchaser CAPEX funding in the amount of [...]. To this effect, Nidec commits [to make available to the purchaser of the divestment business significant funding for future investments for a certain period of time for the production lines in Nidec's plants in Austria and Slovakia. The amount made available is equal to the capital expenditure that Nidec would have committed to the two plants without the transaction]. [...].

3.2 Hold-separate obligations

11. The Notifying Party commits, from the Effective Date until Closing, to procure that the Divestment Business is kept separate from the business(es) that the Notifying Party will be retaining and, after closing of the notified transaction to keep the Divestment Business Separate from the business that the Notifying Party is retaining and to ensure that unless explicitly permitted under these Commitments: (i) management and staff of the business retained by Nidec have no involvement in the Divestment Business; (ii) the Key Personnel and Personnel of the Divestment Business have no involvement in any business retained by Nidec and do not report to any individual outside the Divestment Business.

12. Until Closing, Nidec shall assist the Monitoring Trustee in ensuring that the Divestment Business is managed as a distinct and saleable entity separate from the business which Nidec is retaining. Immediately after the adoption of the Decision, Nidec shall appoint a Hold Separate Manager. The Hold Separate Manager, who shall be part of the Key Personnel, shall manage the Divestment Business independently and in the best interest of the business with a view to ensuring its continued economic viability, marketability and competitiveness and its independence from the businesses retained by Nidec. The Hold Separate Manager shall closely cooperate with and report to the Monitoring Trustee and, if applicable, the Divestiture Trustee. Any replacement of the Hold Separate Manager shall be subject to the procedure laid down in paragraph 10(c) of these Commitments. The Commission may, after having heard Nidec, require Nidec to replace the Hold Separate Manager.
13. To ensure that the Divestment Business is held and managed as a separate entity the Monitoring Trustee shall exercise Nidec's rights as shareholder in the legal entities that constitute the Divestment Business (except for its rights in respect of dividends that are due before Closing), with the aim of acting in the best interest of the business, which shall be determined on a stand-alone basis, as an independent financial investor, and with a view to fulfilling Nidec's obligations under the Commitments. Furthermore, the Monitoring Trustee shall have the power to replace members of the supervisory board or non-executive directors of the board of directors, who have been appointed on behalf of Nidec. Upon request of the Monitoring Trustee, Nidec shall resign as a member of the boards or shall cause such members of the boards to resign.

3.3 Ring-fencing

14. Nidec shall implement, or procure to implement, all necessary measures to ensure that it does not, after the Effective Date, obtain any Confidential Information relating to the Divestment Business and that any such Confidential Information obtained by Nidec before the Effective Date will be eliminated and not be used by Nidec. This includes measures vis-à-vis Nidec's appointees on the supervisory board and/or board of directors of the Divestment Business. In particular, the participation of the Divestment Business in any central information technology network shall be severed to the extent possible, without compromising the viability of the Divestment Business. Nidec may obtain or keep information relating to the Divestment Business which is reasonably necessary for the divestiture of the Divestment Business or the disclosure of which to Nidec is required by law.

3.4 Non-solicitation clause

15. The Parties undertake, subject to customary limitations, not to solicit, and to procure that Affiliated Undertakings do not solicit, the Key Personnel transferred with the Divestment Business for a period of [...] after Closing.

3.5 Due diligence

16. In order to enable potential purchasers to carry out a reasonable due diligence of the Divestment Business, Nidec shall, subject to customary confidentiality assurances and dependent on the stage of the divestiture process:

- (a) provide to potential purchasers sufficient information as regards the Divestment Business;
- (b) provide to potential purchasers sufficient information relating to the Personnel and allow them reasonable access to the Personnel.

3.6 Reporting

- 17. Nidec shall submit written reports in English on potential purchasers of the Divestment Business and developments in the negotiations with such potential purchasers to the Commission and the Monitoring Trustee no later than 10 days after the end of every month following the Effective Date (or otherwise at the Commission's request).
- 18. Nidec shall inform the Commission and the Monitoring Trustee on the preparation of the data room documentation and the due diligence procedure and shall submit a copy of any information memorandum to the Commission and the Monitoring Trustee. Nidec shall submit a list of all potential purchasers having expressed interest in acquiring the Divestment Business to the Commission at each and every stage of the divestiture process, as well as a copy of all the offers made by potential purchasers within five days of their receipt.

Section D - The Purchaser

- 19. In order to be approved by the Commission, the Purchaser must fulfil the following criteria:
 - (a) The Purchaser shall be independent of and unconnected to the Notifying Party and its Affiliated Undertakings (this being assessed having regard to the situation following the divestiture).
 - (b) The Purchaser shall have the financial resources, proven expertise and incentive to maintain and develop the Divestment Business as a viable and active competitive force in competition with the Parties and other competitors.
 - (c) The Purchaser shall either be an industry participant with experience in the refrigeration business or an investor with a proven long-term perspective, successfully growing and developing its acquired companies, as well as having relevant expertise in the European manufacturing sector.
 - (d) The acquisition of the Divestment Business by the Purchaser must neither be likely to create, in light of the information available to the Commission, prima facie competition concerns nor give rise to a risk that the implementation of the Commitments will be delayed. In particular, the Purchaser must reasonably be expected to obtain all necessary approvals from the relevant regulatory authorities for the acquisition of the Divestment Business.
- 20. The final binding sale and purchase agreement (as well as ancillary agreements) relating to the divestment of the Divestment Business shall be conditional on the Commission's approval. When Nidec has reached an agreement with a purchaser, it shall submit a fully documented and reasoned proposal, including a copy of the final agreement(s), within one

week to the Commission and the Monitoring Trustee. Nidec must be able to demonstrate to the Commission that the purchaser fulfils the Purchaser Criteria and that the Divestment Business is being sold in a manner consistent with the Commission's Decision and the Commitments. For the approval, the Commission shall verify that the purchaser fulfils the Purchaser Criteria and that the Divestment Business is being sold in a manner consistent with the Commitments including their objective to bring about a lasting structural change in the market. The Commission may approve the sale of the Divestment Business without one or more Assets or parts of the Personnel, or by substituting one or more Assets or parts of the Personnel with one or more different assets or different personnel, if this does not affect the viability and competitiveness of the Divestment Business after the sale, taking account of the proposed purchaser.

Section E - Trustee

5.1 Appointment procedure

21. Nidec shall appoint a Monitoring Trustee to carry out the functions specified in these Commitments for a Monitoring Trustee. The Notifying Party commits not to close the Concentration before the appointment of a Monitoring Trustee.
22. If Nidec has not entered into a binding sale and purchase agreement regarding the Divestment Business one month before the end of the First Divestiture Period or if the Commission has rejected a purchaser proposed by Nidec at that time or thereafter, Nidec shall appoint a Divestiture Trustee. The appointment of the Divestiture Trustee shall take effect upon the commencement of the Trustee Divestiture Period.
23. The Trustee shall:
 - (a) at the time of appointment, be independent of the Notifying Party and its Affiliated Undertakings;
 - (b) possess the necessary qualifications to carry out its mandate, for example have sufficient relevant experience as an investment banker or consultant or auditor; and
 - (c) neither have nor become exposed to a Conflict of Interest.
24. The Trustee shall be remunerated by the Notifying Party in a way that does not impede the independent and effective fulfilment of its mandate. In particular, where the remuneration package of a Divestiture Trustee includes a success premium linked to the final sale value of the Divestment Business, such success premium may only be earned if the divestiture takes place within the Trustee Divestiture Period.

5.1.1 Proposal by Nidec

25. No later than two weeks after the Effective Date, Nidec shall submit the name or names of one or more natural or legal persons whom Nidec proposes to appoint as the Monitoring Trustee to the Commission for approval. No later than one month before the end of the First Divestiture Period or on request by the Commission, Nidec shall submit a list of one or more persons whom Nidec proposes to appoint as Divestiture Trustee to the Commission

for approval. The proposal shall contain sufficient information for the Commission to verify that the person or persons proposed as Trustee fulfil the requirements set out in paragraph 23 and shall include:

- (a) the full terms of the proposed mandate, which shall include all provisions necessary to enable the Trustee to fulfil its duties under these Commitments;
- (b) the outline of a work plan which describes how the Trustee intends to carry out its assigned tasks;
- (c) an indication whether the proposed Trustee is to act as both Monitoring Trustee and Divestiture Trustee or whether different trustees are proposed for the two functions.

5.1.2 Approval or rejection by the Commission

26. The Commission shall have the discretion to approve or reject the proposed Trustee(s) and to approve the proposed mandate subject to any modifications it deems necessary for the Trustee to fulfil its obligations. If only one name is approved, Nidec shall appoint or cause to be appointed the person or persons concerned as Trustee, in accordance with the mandate approved by the Commission. If more than one name is approved, Nidec shall be free to choose the Trustee to be appointed from among the names approved. The Trustee shall be appointed within one week of the Commission's approval, in accordance with the mandate approved by the Commission.

5.1.3 New proposal by Nidec

27. If all the proposed Trustees are rejected, Nidec shall submit the names of at least two more natural or legal persons within one week of being informed of the rejection, in accordance with paragraphs 21 and 26 of these Commitments.

5.1.4 Trustee nominated by the Commission

28. If all further proposed Trustees are rejected by the Commission, the Commission shall nominate a Trustee, whom Nidec shall appoint, or cause to be appointed, in accordance with a trustee mandate approved by the Commission.

5.2 **Functions of the Trustee**

29. The Trustee shall assume its specified duties and obligations in order to ensure compliance with the Commitments. The Commission may, on its own initiative or at the request of the Trustee or Nidec, give any orders or instructions to the Trustee in order to ensure compliance with the conditions and obligations attached to the Decision.

5.2.1 Duties and obligations of the Monitoring Trustee

30. The Monitoring Trustee shall:
- (a) propose in its first report to the Commission a detailed work plan describing how it intends to monitor compliance with the obligations and conditions attached to the Decision.

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- (b) oversee, in close co-operation with the Hold Separate Manager, the on-going management of the Divestment Business with a view to ensuring its continued economic viability, marketability and competitiveness and monitor compliance by Nidec with the conditions and obligations attached to the Decision. To that end the Monitoring Trustee shall:
- (i) monitor the preservation of the economic viability, marketability and competitiveness of the Divestment Business, and the keeping separate of the Divestment Business from the business retained by the Parties, in accordance with paragraphs 10-11 of these Commitments, including [...];
 - (ii) supervise the management of the Divestment Business as a distinct and saleable entity, in accordance with paragraph 12 of these Commitments;
 - (iii) with respect to Confidential Information:
 - determine all necessary measures to ensure that Nidec does not after the Effective Date obtain any Confidential Information relating to the Divestment Business,
 - in particular strive for the severing of the Divestment Business’ participation in a central information technology network to the extent possible, without compromising the viability of the Divestment Business,
 - make sure that any Confidential Information relating to the Divestment Business obtained by Nidec before the Effective Date is eliminated and will not be used by Nidec and
 - decide whether such information may be disclosed to or kept by Nidec as the disclosure is reasonably necessary to allow Nidec to carry out the divestiture or as the disclosure is required by law;
 - (iv) monitor the splitting of assets and the allocation of Personnel between the Divestment Business and Nidec or Affiliated Undertakings;
- (c) propose to Nidec such measures as the Monitoring Trustee considers necessary to ensure Nidec’s compliance with the conditions and obligations attached to the Decision, in particular the maintenance of the full economic viability, marketability or competitiveness of the Divestment Business, the holding separate of the Divestment Business and the non-disclosure of competitively sensitive information;
- (d) review and assess potential purchasers as well as the progress of the divestiture process and verify that, dependent on the stage of the divestiture process:
- (i) potential purchasers receive sufficient and correct information relating to the Divestment Business and the Personnel in particular by reviewing, if available, the data room documentation, the information memorandum and the due diligence process, and

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- (ii) potential purchasers are granted reasonable access to the Personnel;
- (e) act as a contact point for any requests by third parties, in particular potential purchasers, in relation to the Commitments;
- (f) provide to the Commission, sending Nidec a non-confidential copy at the same time, a written report within 15 days after the end of every month that shall cover the operation and management of the Divestment Business as well as the splitting of assets and the allocation of Personnel so that the Commission can assess whether the business is held in a manner consistent with the Commitments and the progress of the divestiture process as well as potential purchasers;
- (g) promptly report in writing to the Commission, sending Nidec a non-confidential copy at the same time, if it concludes on reasonable grounds that Nidec is failing to comply with these Commitments;
- (h) within one week after receipt of the documented proposal referred to in paragraph 20 of these Commitments, submit to the Commission, sending Nidec a non-confidential copy at the same time, a reasoned opinion as to the suitability and independence of the proposed purchaser and the viability of the Divestment Business after the Sale and as to whether the Divestment Business is sold in a manner consistent with the conditions and obligations attached to the Decision, in particular, if relevant, whether the Sale of the Divestment Business without one or more Assets or not all of the Personnel affects the viability of the Divestment Business after the sale, taking account of the proposed purchaser;
- (i) assume the other functions assigned to the Monitoring Trustee under the conditions and obligations attached to the Decision.

31. If the Monitoring and Divestiture Trustee are not the same persons, the Monitoring Trustee and the Divestiture Trustee shall cooperate closely with each other during and for the purpose of the preparation of the Trustee Divestiture Period in order to facilitate each other's tasks.

5.2.2 Duties and obligations of the Divestiture Trustee

32. Within the Trustee Divestiture Period, the Divestiture Trustee shall sell at no minimum price the Divestment Business to a purchaser, provided that the Commission has approved both the purchaser and the final binding sale and purchase agreement (and ancillary agreements) as in line with the Commission's Decision and the Commitments in accordance with paragraphs 19 and 20 of these Commitments. The Divestiture Trustee shall include in the sale and purchase agreement (as well as in any ancillary agreements) such terms and conditions as it considers appropriate for an expedient sale in the Trustee Divestiture Period. In particular, the Divestiture Trustee may include in the sale and purchase agreement such customary representations and warranties and indemnities as are reasonably required to effect the sale. The Divestiture Trustee shall protect the legitimate financial interests of Nidec, subject to the Notifying Party's unconditional obligation to divest at no minimum price in the Trustee Divestiture Period.

33. In the Trustee Divestiture Period (or otherwise at the Commission's request), the Divestiture Trustee shall provide the Commission with a comprehensive monthly report written in English on the progress of the divestiture process. Such reports shall be submitted within 15 days after the end of every month with a simultaneous copy to the Monitoring Trustee and a non-confidential copy to the Notifying Party.

5.3 Duties and obligations of the Parties

34. Nidec shall provide and shall cause its advisors to provide the Trustee with all such co-operation, assistance and information as the Trustee may reasonably require to perform its tasks. The Trustee shall have full and complete access to any of Nidec's or the Divestment Business' books, records, documents, management or other personnel, facilities, sites and technical information necessary for fulfilling its duties under the Commitments and Nidec and the Divestment Business shall provide the Trustee upon request with copies of any document. Nidec and the Divestment Business shall make available to the Trustee one or more offices on their premises and shall be available for meetings in order to provide the Trustee with all information necessary for the performance of its tasks.
35. Nidec shall provide the Monitoring Trustee with all managerial and administrative support that it may reasonably request on behalf of the management of the Divestment Business. This shall include all administrative support functions relating to the Divestment Business which are currently carried out at headquarters level. Nidec shall provide and shall cause its advisors to provide the Monitoring Trustee, on request, with the information submitted to potential purchasers, in particular give the Monitoring Trustee access to the data room documentation and all other information granted to potential purchasers in the due diligence procedure. Nidec shall inform the Monitoring Trustee on possible purchasers, submit lists of potential purchasers at each stage of the selection process, including the offers made by potential purchasers at those stages, and keep the Monitoring Trustee informed of all developments in the divestiture process.
36. Nidec shall grant or procure Affiliated Undertakings to grant comprehensive powers of attorney, duly executed, to the Divestiture Trustee to effect the sale (including ancillary agreements), the Closing and all actions and declarations which the Divestiture Trustee considers necessary or appropriate to achieve the sale and the Closing, including the appointment of advisors to assist with the sale process. Upon request of the Divestiture Trustee, Nidec shall cause the documents required for effecting the sale and the Closing to be duly executed.
37. Nidec shall indemnify the Trustee and its employees and agents (each an "**Indemnified Party**") and hold each Indemnified Party harmless against, and hereby agrees that an Indemnified Party shall have no liability to Nidec for, any liabilities arising out of the performance of the Trustee's duties under the Commitments, except to the extent that such liabilities result from the wilful default, recklessness, gross negligence or bad faith of the Trustee, its employees, agents or advisors.
38. At the expense of Nidec, the Trustee may appoint advisors (in particular for corporate finance or legal advice), subject to Nidec's approval (this approval not to be unreasonably withheld or delayed) if the Trustee considers the appointment of such advisors necessary

or appropriate for the performance of its duties and obligations under the Mandate, provided that any fees and other expenses incurred by the Trustee are reasonable. Should Nidec refuse to approve the advisors proposed by the Trustee the Commission may approve the appointment of such advisors instead, after having heard Nidec. Only the Trustee shall be entitled to issue instructions to the advisors. Paragraph 37 of these Commitments shall apply mutatis mutandis. In the Trustee Divestiture Period, the Divestiture Trustee may use advisors who served Nidec during the Divestiture Period if the Divestiture Trustee considers this in the best interest of an expedient sale.

39. Nidec agrees that the Commission may share Confidential Information proprietary to Nidec with the Trustee. The Trustee shall not disclose such information and the principles contained in Article 17 (1) and (2) of the Merger Regulation apply mutatis mutandis.
40. The Notifying Party agrees that the contact details of the Monitoring Trustee are published on the website of the Commission's Directorate-General for Competition and they shall inform interested third parties, in particular any potential purchasers, of the identity and the tasks of the Monitoring Trustee.
41. For a period of 10 years from the Effective Date the Commission may request all information from the Parties that is reasonably necessary to monitor the effective implementation of these Commitments.

5.4 Replacement, discharge and reappointment of the Trustee

42. If the Trustee ceases to perform its functions under the Commitments or for any other good cause, including the exposure of the Trustee to a Conflict of Interest:
 - (a) the Commission may, after hearing the Trustee and Nidec, require Nidec to replace the Trustee; or
 - (b) Nidec may, with the prior approval of the Commission, replace the Trustee.
43. If the Trustee is removed according to paragraph 42 of these Commitments, the Trustee may be required to continue in its function until a new Trustee is in place to whom the Trustee has effected a full hand over of all relevant information. The new Trustee shall be appointed in accordance with the procedure referred to in paragraphs 21-27 of these Commitments.
44. Unless removed according to paragraph 42 of these Commitments, the Trustee shall cease to act as Trustee only after the Commission has discharged it from its duties after all the Commitments with which the Trustee has been entrusted have been implemented. However, the Commission may at any time require the reappointment of the Monitoring Trustee if it subsequently appears that the relevant remedies might not have been fully and properly implemented.

Section F - The review clause

45. The Commission may extend the time periods foreseen in the Commitments in response to a request from Nidec or, in appropriate cases, on its own initiative. Where Nidec requests

an extension of a time period, it shall submit a reasoned request to the Commission no later than one month before the expiry of that period, showing good cause. This request shall be accompanied by a report from the Monitoring Trustee, who shall, at the same time send a non-confidential copy of the report to the Notifying Party. Only in exceptional circumstances shall Nidec be entitled to request an extension within the last month of any period.

46. The Commission may further, in response to a reasoned request from the Notifying Party showing good cause waive, modify or substitute, in exceptional circumstances, one or more of the undertakings in these Commitments. This request shall be accompanied by a report from the Monitoring Trustee, who shall, at the same time send a non-confidential copy of the report to the Notifying Party. The request shall not have the effect of suspending the application of the undertaking and, in particular, of suspending the expiry of any time period in which the undertaking has to be complied with.

Section G - Entry into force

47. The Commitments shall take effect upon the date of adoption of the Decision.

[...]

[...]

duly authorised for and on behalf of Nidec

SCHEDULE

1. The Divestment Business consists of Nidec’s Refrigeration Compressor business, which consists of the following entities:
 - (a) Nidec Global Appliance Austria GmbH, Jahnstraße 30, 8280 Fürstenfeld, Austria (“**Nidec Austria**”), including Nidec Austria’s manufacturing plant located at the same address (“**Nidec Austria Plant**”);
 - (b) Nidec Global Appliance Slovakia s.r.o., Tovàrenská 49, 953 01 Zlaté Moravce, Slovak Republic, with identity number 35 800 399, and registered with the Commercial Register of the District Court Nitra, section: Sro under file No. 13235/N (“**Nidec Slovakia**”), including Nidec Slovakia’s manufacturing plant located at the same address (“**Nidec Slovakia Plant**”);
 - (c) Nidec Compressors (Tianjin) Co., Ltd., Wuqing Development Zone, No. 27, Kai Yuan Road, 301700 Tianjin, People’s Republic of China (“**Nidec China**”), including Nidec China’s manufacturing plant located at the same address (“**Nidec China Plant**”);
 - (d) Nidec Global Appliance Italy Srl, Piazza Vittorio Emanuele II, n°3 10024 Moncalieri, Italy (“**Nidec Italy**”);
 - (e) Nidec Global Appliance Germany GmbH, Mads-Clausen-Str. 7, 24939 Flensburg, Germany;
 - (f) Nidec Global Appliance Compressors GmbH, Mads-Clausen-Str. 7, 24939 Flensburg, Germany (together with Nidec Global Appliance Germany GmbH, “**Nidec Germany**”);
 - (g) Nidec Global Appliance USA Inc., 4000 Northfield Way, Suite 600 Roswell, GA 30076 (“**Nidec USA**”),

together with all associated assets, contracts, customer records, IP & knowhow, personnel and other interests, except the employees and businesses described in paragraph 4 below. Organisation charts of the Divestment Business are enclosed in **Annex 1**.
2. The Nidec Austria Plant, the Nidec Slovakia Plant and the Nidec China Plant include the Refrigeration Compressor production lines to produce Nidec’s Delta Series, Kappa Series, D-Series, F-Series, G-Series, N-Series, S-Series, T-Series and X-Series Refrigeration Compressors, and all pipeline projects related to these Refrigeration Compressor platforms (“**Divestment Products**”). For the 2018 sales volumes and values by series, please see **Annex 2**. These products constitute all of the refrigeration compressors manufactured by Nidec, excluding battery-driven refrigeration compressors for mobile applications.
3. In accordance with paragraph 8 of these Commitments, the Divestment Business includes, but is not limited to:
 - (a) the following main **tangible assets**:

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- (i) the freehold title and the leasehold title to the site areas on which, respectively, the Nidec Austria Plant is located in Fürstenfeld, the Nidec Slovakia Plant is located in Zlaté Moravce and the Nidec China Plant is located in Tianjin;
 - (ii) the properties on the site areas including the production plants and warehousing;
 - (iii) the production lines to produce the Divestment Products;
 - (iv) the leasehold titles to offices for Nidec Germany, Nidec Italy, and Nidec USA;
 - (v) the production and quality control records in respect of the Divestment Products;
 - (vi) Nidec's inventory of, and orders for, the Divestment Products at the time of closing of the divestiture sale to the Purchaser;
 - (vii) the existing sales and promotional material designed for and used in connection with the Divestment Products;
- (b) Nidec commits to make available to the Purchaser CAPEX funding in the amount of [...]. To this effect, Nidec commits [to make available to the purchaser of the divestment business significant funding for future investments for a certain period of time for the production lines in Nidec's plants in Austria and Slovakia. The amount made available is equal to the capital expenditure that Nidec would have committed to the two plants without the transaction]. [...].
- (c) the following main **intangible assets**:
- (i) all patents owned (a non-exhaustive list of which is provided at **Annex 3**) or registered but not yet published by Nidec (a non-exhaustive list of which is provided at **Annex 4**) existing as of the date of the divestment agreement which relate to the Divestment Business to manufacture and sell the Divestment Products, subject to a non-exclusive license back to Nidec in relation to the patents identified in **Annex 5**, which are relevant to the battery-driven refrigeration compressors for use in mobile applications;
 - (ii) subject to Nidec becoming the owner of the German utility model with registration number DE 202012013046 as a result of the Concentration, a non-exclusive, perpetual, royalty-free license under that utility model to operate the Divestment Business as at the date of the sale and purchase agreement to be concluded between Nidec and the Purchaser;
 - (iii) all of the knowhow (including designs, drawings, plans and the like) that is used to develop, manufacture and sell the Divestment Products and all pipeline products and pipeline projects (including but not limited to those pipeline products and pipeline projects described in **Annex 6**), and any intellectual property rights in such knowhow;

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- (iv) to the extent legally possible, all Nidec-held data and relevant product registration/authorisations, and documents related thereto (if any), for all models of the Divestment Products, including those that relate to plant or product upgrades, quality certificates and approvals pertaining to the Divestment Business;
 - (v) all Nidec-held data related to the quality management system of the Divestment Products, including historic records on compliance with applicable regulations and corrective/preventive actions;
 - (vi) the Secop website;
 - (vii) the Secop brand and any associated trademarks and product names;
- (d) the main **licences, permits and authorisations** listed in **Annex 7**;
- (e) all **contracts, agreements, leases, commitments and understandings** relating to the Divestment Business, including, for example:
- (i) supply contracts and relationships described in **Annex 8** and **Annex 9**;
 - (ii) relationships with all customers supplied by the Divestment Business listed in **Annex 10** and new contracts with the limited number of customers having written contracts for the purchase of the Divestment Products described in **Annex 11**; and
 - (iii) IT agreements and licences that apply to the Divestment Business, for which Nidec will either: (i) cause Nidec Austria, Nidec Slovakia and Nidec China to enter into new agreements and licences in order to reflect the agreements and licences from which they currently benefit; or (ii) facilitate the Purchaser in migrating the Divestment Business to the agreements and licences used by the Purchaser in the rest of its business;
- (f) a list of all **customers** of the Divestment Business with contact details, as well as all other available customer specific information, including (but not limited to) customer records, customer reports, transactional data and customer accreditations relating to the Divestment Products;
- (g) the following **Personnel**: all employees of the Divestment Business, subject to applicable labour laws (including employees listed in **Annex 12**), except as described in paragraph 4 below;
- (h) the following **Key Personnel**:
- [...]
- (i) transitional services agreements, for a period of up to [...] after Closing, at cost and in such a manner as not to compromise the independence of the Divestment Business, to the extent required by the Purchaser:
- (i) for the supply of IT services; and

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- (ii) for the supply of support services pertaining to the patents, know-how and other intellectual property rights used to develop, manufacture and sell the Divestment Products.
- 4. The Divestment Business shall **not** include:
 - (a) Nidec's business, including all relevant employees, as specified in **Annex 13**, relating to battery-driven refrigeration compressors for use in mobile applications currently manufactured in the Nidec China Plant, including the two production lines used exclusively to produce those compressors, which will be moved on a timely basis to another Nidec plant; and
 - (b) Nidec's business, including all relevant employees, as specified in **Annex 13**, relating to motors for washing machines, dryers and dishwashers currently manufactured in the Nidec Austria Plant and Nidec Slovakia Plant, including the three production lines used to produce those motors, which will be moved on a timely basis to another Nidec plant.
- 5. If there is any asset or personnel which is not covered by paragraph 3 of this Schedule, but which is both used (exclusively or not) in the Divestment Business and necessary for the continued viability and competitiveness of the Divestment Business, that asset or adequate substitute will be offered to potential purchasers.

LIST OF ANNEXES

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Annex 1: Organization Charts of Divestment Business

[...]

Annex 2: 2018 turnover from sales of the Divestment Products by series

[...]

Annex 3: List of patents to be transferred to Purchaser

[...]

Annex 4: List of pending patents

[...]

Annex 5: List of patents to be licensed back to Nidec

[...]

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Annex 7: List of key licences, permits and authorisations required for Divestment Business

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Annex 9: Table of agreements with suppliers to Divestment Business

[...]

Annex 10: List of current customers of Divestment Business

[...]

Annex 11: Table of agreements with key customers of Divestment Business

[...]

Annex 12: List of Personnel in Divestment Business

[...]

Annex 13: List of excluded personnel

[...]

Annex 14: Estimated Post-Transaction / Post-Divestment Market Shares in Light Commercial, Variable Speed Light Commercial and Variable Speed Household

[...]