Case M.7822 - DENTSPLY / SIRONA

Only the English text is available and authentic.

REGULATION (EC) No 139/2004
MERGER PROCEDURE

Article 6(1)(b) in conjunction with Art 6(2)
Date: 25/02/2016

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To the notifying party:

Dear Madam(s) and/or Sir(s),

**Subject:** Case M.7822 – Dentsply/Sirona
Commission decision pursuant to Article 6(1)(b) in conjunction with Article 6(2) of Council Regulation No 139/2004 and Article 57 of the Agreement on the European Economic Area

(1) On 7 January 2016, the European Commission received a notification of a proposed concentration pursuant to Article 4 of Council Regulation (EC) No 139/2004 by which Dentsply International Inc. (“Dentsply” or "the Notifying Party") acquires within the meaning of Article 3(1)(b) of the Merger Regulation control of the whole of Sirona Dental Systems, Inc. (“Sirona”), both of the U.S., by way of purchase of shares (the "Transaction"). Dentsply and Sirona are collectively referred to as "the Parties".

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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 L 1, 3.1.1994, p.3 (“the EEA Agreement”).

I. THE PARTIES

(2) Dentsply is a designer, developer, manufacturer and marketer of a broad range of consumable dental products for the professional dental market. Dentsply also manufactures and markets other consumable medical devices.

(3) Sirona is a global manufacturer of dental equipment and is focused on developing, manufacturing, and marketing innovative solutions for dentists.

II. THE OPERATION AND THE CONCENTRATION

(4) Dentsply is taking over the entirety of Sirona. Pursuant to the Agreement and Plan of Merger dated 15 September 2015, Dawkins Merger Sub Inc., a wholly-owned subsidiary of Dentsply, will be merged with and into Sirona, with Sirona as the surviving entity becoming a wholly-owned subsidiary of Dentsply. Upon completion, Dentsply will be renamed Dentsply Sirona Inc. ("Combined Entity").

(5) Therefore, the Transaction is an acquisition of sole control of Sirona by Dentsply and constitutes a concentration within the meaning of Article 3(1)(b) of the Merger Regulation.

III. EU DIMENSION

(6) The undertakings concerned have a combined aggregate world-wide turnover of more than EUR 2 500 million4 (Dentsply: EUR 2 199 million, Sirona: EUR 881 million). In each of at least three EU Member States, Dentsply’s and Sirona’s combined aggregate turnover is more than EUR 100 million, [...] the aggregate turnover of each of Dentsply and Sirona is more than EUR 25 million in each of [...] and the aggregate EU-wide turnover of each of Dentsply and Sirona is more than EUR 100 million (Dentsply: EUR [...] million, Sirona: EUR [...] million); and neither Dentsply nor Sirona achieve more than two-thirds of their aggregate EU-wide turnover within one and the same EU Member State. The notified operation therefore has an EU dimension within the meaning of Article 1(3) of the EU Merger Regulation.

IV. MARKET DEFINITION

IV.1. Introduction

(7) The Transaction will combine Dentsply’s dental consumables/materials business with Sirona’s dental equipment business.

(8) The Parties’ activities overlap in (a) CAD/CAM ("computer-aided design and computer-aided manufacturing") materials, and more specifically in the segments for the supply of zirconia CAD/CAM blocks and discs and glass ceramic CAD/CAM blocks, (b) small dental equipment, including endodontic motors, contra-angle handpieces, ultrasonic scalers and ultrasonic scaler tips, (c) dental imaging systems, and more specifically intraoral sensor holders and (d) dental implant systems, including abutments, implant planning

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4 Turnover calculated in accordance with Article 5(1) of the Merger Regulation and the Commission Consolidated Jurisdictional Notice (OJ C95, 16.04.2008, p1).
software and implant guides. Of the segments mentioned above, affected are the ones concerning zirconia CAD/CAM blocks and discs in Germany, and endodontic motors and contra-angle handpieces at the EEA level and in several Member States.

(9) The Parties are also active in neighbouring segments, of which affected are: (a) dental CAD/CAM systems and CAD/CAM materials, (b) treatment centres and small dental equipment, such as endodontic motors and contra-angle handpieces and (c) endodontic motors and contra-angle handpieces.5

IV.2. CAD/CAM systems

IV.2.1. Product market definition

IV.2.1.1. Introduction

(10) CAD/CAM is a dental restoration technology. Other dental restoration technologies include casting, pressing and 3D printing.

(11) The CAD/CAM technology can be used by dental laboratories ("labside CAD/CAM systems") to manufacture restorative materials (e.g. crowns, bridges, and inlays) for multiple dentists based on the specifications for individual patients. The CAD/CAM technology can also be used by the dentists themselves in their office ("chairside CAD/CAM systems").

(12) Chairside CAD/CAM systems comprise, in a complete chairside system, a digital impression system (scanner), 3D dental design software, and a chairside mill. The workflow is as follows: a digital impression system scans the damaged area, captures the image of the tooth or teeth requiring restoration and proposes the specifications for the restoration. The milling unit then mills the dental restoration to the required specifications based upon the captured image and the dentist’s design specifications. According to the Parties’ estimates, the penetration of CAD/CAM systems in Europe amounts to approximately 5-10% of dental practices (approximately 3% in France, 7% in the UK, 2% in Italy, 8% in the Netherlands and peaking in Germany – approximately 15% in 2014).

IV.2.1.2. The Notifying Party's view

(13) The Notifying Party submits that there is no need to distinguish between CAD technology and CAM technology as the two technologies have to be used together to enable dentists and dental laboratories to create high-precision designs (using a scanner) and dental restorations (using a milling unit) – be it in a single session at the dentist's premises (chairside CAD/CAM systems) or through sending the scan to a laboratory (labside CAD/CAM systems).

5 The Parties are also active in the non-affected neighbouring markets for intraoral sensors and intraoral sensor holders. In addition, Dentsply is active in Minor Tooth Movement (MTM) systems and dental implant systems which could be integrated in Sirona's chairside CAD/CAM systems. However, these markets are not neighbouring markets since they are not complementary (the use of one system does not essentially imply the use of the other system) nor belonging to a range of products purchased by customers for the same end use.
The Notifying Party further submits that CAD/CAM systems should be regarded as a single product market as the basic technology and components of a labside and a chairside system are essentially the same and suppliers of labside systems could easily supply chairside systems. Labside CAD/CAM systems are used by dental laboratories, where technicians prepare dental restorations ordered by a dentist. Chairside CAD/CAM systems allow for the entire process including production of the dental restoration to be done directly in the dentist's office – thus eliminating the need for dentists to outsource the production of restorations to laboratories and allowing the completion of the procedure in a single session, with obvious benefits for the patients.

IV.2.1.3. Results of the market investigation and Commission's assessment

The market investigation results indicated, contrary to the Parties' views, that the chairside and labside CAD/CAM systems are not part of the same relevant market. Using the chairside CAD/CAM system “the dentist scans the tooth using a 3D scanner, and then the data set is sent to the software [...], where the restoration is designed. Afterwards, the design is moved to the software connected to the milling machine, and then the production can start.”6 Opting for the labside CAD/CAM system “the dentist would use a 3D scanner and a lab would work with a third party design software and a milling machine.”7 Even though certain elements of the two systems, such as the intraoral scanners and some software, can be used both in chairside and labside CAD/CAM systems, there is no supply and demand side substitutability between the two systems.

As to the demand side, a dentist willing to install a CAD/CAM system is limited to the chairside CAD/CAM system and does not have the option of purchasing the labside system instead, as the two technologies differ considerably.8 Indeed, a labside system cannot be used in a dentist office, it is operated by lab technicians, and different materials are used. Chairside systems allow dentists to create tooth restorations (such as inlays or crowns) in a single session. Rather than creating a mould or obtaining a digital scan and sending it to an external laboratory, dentists can scan the patient’s tooth with a digital scanner, create a virtual restoration on a computer, have a small machine mill the restoration out of a CAD/CAM block, and place the restoration in the patient’s mouth.

As to the supply side, whereas “labside” CAD/CAM technology has existed for decades, Sirona pioneered the use of this “chairside” technology in the dentist’s practice.9 Participants to the market investigation indicated that there are high technological barriers to entry into chairside CAD/CAM systems and there are only two competitors present on the market offering a complete chairside CAD/CAM system apart from Sirona (Planmeca and

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6 Agreed minutes of a phone call with a market participant, 15.01.2016.
7 Ibid.
8 Agreed minutes of a phone call with a market participant, 20.01.2016.
9 Parties' submission of 31 January 2016.
Carestream),\textsuperscript{10} while other competitors like Align Technology\textsuperscript{11} and 3Shape\textsuperscript{12} offer only parts of the chairside CAD/CAM system.\textsuperscript{13}

(18) Based on the results of the market investigation, the Commission finds that the chairside CAD/CAM systems constitute a separate product market from the labside CAD/CAM systems.

IV.2.2. Geographic market definition

\textit{IV.2.2.1. The Notifying Party's view}

(19) The Notifying Party submits that the market for CAD/CAM systems is EEA-wide in scope. All major suppliers have one manufacturing facility in Europe from which they supply the European market. Prices are not materially different across these regions and national reimbursement systems do not play a role. Transport costs do not play a role. Furthermore, the products that Sirona distributes in the European Union bear the \textit{Conformité Européenne} ("CE") mark.

\textit{IV.2.2.2. Results of the market investigation and Commission's assessment}

(20) The results of the market investigation confirmed that the prices of CAD/CAM systems sold by manufacturers to distributors are mostly harmonised in the European Union. Differences in prices are mostly related to distributors' margins, since dentists tend to purchase the CAD/CAM system from a local distributor.\textsuperscript{14} The penetration rate of the chairside CAD/CAM system as well as the market shares of Sirona in the Member States may also slightly vary depending on the EEA country.

(21) For the purpose of the present case, it is not necessary to define the precise scope of the relevant geographic market for chairside CAD/CAM systems, since serious doubts arise irrespective of whether the market is EEA-wide or national.

IV.3. Dental CAD/CAM materials

IV.3.1. Product market definition

\textit{IV.3.1.1. Introduction}

(22) Dental CAD/CAM materials ("CAD/CAM materials") are the substrate materials used in CAD/CAM systems to produce prosthetics including crowns, veneers, inlays, onlays and bridges. CAD/CAM materials come in the shape of blocks and discs. The blocks and discs are manufactured specifically for use in CAD/CAM milling systems. In general, one block is

\textsuperscript{10} See agreed minutes of phone calls with customers, 27.01.2016.
\textsuperscript{11} Align Technology offers only 3D intraoral scanners - Agreed minutes of a phone call with a market participant, 15.01.2016.
\textsuperscript{12} 3Shape is not providing the whole CAD/CAM system. It is active mainly in the intra oral scanners and the software, but not the milling machine itself - Agreed minutes of phone calls with market participants, 14.01.2016 and 15.01.2016.
\textsuperscript{13} Agreed minutes of a phone call with a market participant, 15.01.2016.
\textsuperscript{14} Agreed minutes of phone calls with customers, 29.01.2016 and 27.01.2016.
used for one crown unit while multiple inlays, onlays and veneers can be milled from one disc.

(23) CAD/CAM discs are larger units than blocks and capable of generating multiple crowns and bridges per unit; they are only used in labside CAD/CAM systems. CAD/CAM blocks are used in labside and chairside CAD/CAM systems. The Parties estimate that in Europe approximately 90% of CAD/CAM materials are used in labside CAD/CAM systems and 10% of CAD/CAM materials are used in chairside CAD/CAM systems.

(24) CAD/CAM materials can be distinguished by material into three main categories, namely zirconia, glass ceramic\(^\text{15}\) (which include high strength glass ceramic, standard glass ceramic and feldspar) and acrylics.\(^\text{16}\) Zirconia CAD/CAM blocks and discs are for the moment predominantly used in labside CAD/CAM systems\(^\text{17}\), while glass ceramic, acrylic and zirconia CAD/CAM blocks are used both in labside and chairside CAD/CAM systems.\(^\text{18}\)

**IV.3.1.2. The Notifying Party's view**

(25) According to the Notifying Party, separate product markets for CAD/CAM discs and blocks on a material-by-material basis would not be warranted.

**IV.3.1.3. Results of the market investigation and Commission's assessment**

(26) Based on the results of the market investigation, the Commission considers that there are distinct markets for CAD/CAM discs used in labside systems and CAD/CAM blocks. In particular, there is no demand-side substitutability since discs are generally used by laboratories and blocks by dentists. There is also no supply-side substitutability between blocks and discs, as the materials, production process, IP rights etc. are different in case of either category. As to the distinction by materials, the market investigation results indicated that in general different materials are substitutable; however, depending on the circumstances, some materials can be more suitable for specific end-uses.\(^\text{19}\)

(27) The market investigation results indicated furthermore that CAD/CAM blocks are differentiated products presenting different characteristics in terms of material, quality and performance. They are predominantly used in chairside CAD/CAM systems (around 90% of all CAD/CAM blocks are used

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\(^{15}\) Glass ceramic CAD/CAM materials are available only in the shape of blocks.

\(^{16}\) Agreed minutes of a phone call with a market participant, 20.01.2016.

\(^{17}\) The Parties estimate that zirconia CAD/CAM blocks and discs account for approximately 70% of the CAD/CAM materials used in the labside, while glass ceramic blocks account for approximately 26%. In the Parties’ view, sub-segmenting the segment for zirconia CAD/CAM materials into blocks and discs would not be warranted. The raw materials are the same, the manufacturing process and machines employed are the same, and the end-use application is the same. The only thing that differs is the mould that gives the product its final shape.

\(^{18}\) The Parties estimate that glass ceramic CAD/CAM blocks account for approximately 93% of the CAD/CAM materials used in chairside CAD/CAM systems, acrylic materials account for 6%, while zirconia accounts for 1%.

\(^{19}\) Agreed minutes of a phone call with a market participant, 20.01.2016.
in chairside systems, in particular glass ceramic and acrylic CAD/CAM blocks, and only a small part in labside CAD/CAM systems. Conversely, CAD/CAM discs are used exclusively in labside CAD/CAM systems and cannot be used in chairside CAD/CAM systems.

(28) Based on the results of the market investigation, the Commission finds that the CAD/CAM blocks constitute a separate product market from the labside CAD/CAM discs.

IV.3.2. Geographic market definition

IV.3.2.1. The Notifying Party's view

(29) The Notifying Party submits that the market for CAD/CAM materials is at least EEA-wide in scope. All major competitors have one manufacturing facility in Europe from which they supply the European market. Transport costs do not play any role and prices and regulatory approval procedures are uniform across EEA Member States.

IV.3.2.2. Results of the market investigation and Commission's assessment

(30) The results of the market investigation indicated that the prices of CAD/CAM blocks sold by manufacturers to distributors are mostly harmonised in the European Union. Differences in prices are mostly related to distributors' margins, since dentists tend to purchase the CAD/CAM materials from a local distributor.21

(31) For the purposes of the present case, it is not necessary to define the precise scope of the relevant geographic market for CAD/CAM materials, since the horizontal overlap does not raise competition concerns under any plausible alternative geographic market definition whereas the conglomerate relationship raises competition concerns irrespective of whether the relevant market is EEA-wide or national.

IV.4. Treatment centres

IV.4.1. Product market definition

IV.4.1.1. Introduction

(32) The basic components of a treatment centre include at least the patient chair, the dentists stool, the dentists work station (including the monitor, the tray and the instrument holders), the assistant work station, and lighting. Small dental equipment is used alongside the treatment centre. Based on their default configuration, the treatment centres can be classified in "premium", "standard" or "economy" grade. The differentiator between the grades lies not in the underlying technologies or functionalities, but in the design and how the treatment centre is configured.

20 See replies to the RFI "Questions to block manufacturers" sent to the market participants on 28.01.2016.
21 Agreed minutes of a phone call with a market participant, 15.01.2016.
IV.4.1.2. The Notifying Party's view

(33) The Notifying Party submits that there is no need to separate the treatment centres based on grades, as the components used are largely the same across different grades, default features of lower-end treatment centres can be upgraded to match the characteristics of higher-end devices, since technological advances lead to a convergence between the different grades as original premium features quickly become available also in the economy grade.

IV.4.1.3. Results of the market investigation and Commission's assessment

(34) For the purpose of the case at hand, the market definition can be left open as the Transaction does not give rise to any competition concerns under any plausible market definition.

IV.4.2. Geographic market definition

IV.4.2.1. The Notifying Party's view

(35) The Notifying Party submits that the market for treatment centres is global or at least EEA wide in scope. All major competitors have only one manufacturing facility in Europe or abroad from which they supply the European market. Transport costs are negligible and regulatory approvals are uniform across EEA Member States. Commercialization of medical devices in Europe, including treatment centres, is regulated by the EU which requires that all medical products bear the CE mark, indicating compliance with the European Medical Device Directive and related provisions. Moreover, Sirona’s recommended list prices are uniform across the EEA and vary only with regards to the configuration chosen while reimbursement schemes do not play a role.

IV.4.2.2. Results of the market investigation and Commission's assessment

(36) For the purposes of the present case, it is not necessary to define the precise scope of the relevant geographic market for treatment centres since the Transaction is not likely to give rise to competition concerns under any plausible alternative geographic market definition.

IV.5. Small dental equipment

IV.5.1. Product market definition

IV.5.1.1. Introduction

(37) Small dental equipment comprises a broad range of products aimed for common day-to-day dental care and sold to dentists, such as endodontic motors, handpieces, ultrasonic scalers and ultrasonic scaler tips. For the

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purpose of this decision only the products giving rise to affected markets will be discussed.

(38) Endodontic motors are used to power handpieces or endodontic files during endodontic procedures. Endodontic procedures are procedures for the treatment of infected pulp in the root canals of a tooth.23

(39) Straight and contra-angle handpieces are drills used to bore through tooth enamel, as well as to clean plaque from the tooth’s surface. They are used to prepare or shape a tooth structure prior to the insertion of a crown or filling.

IV.5.1.2. The Notifying Party's view

(40) The Notifying Party submits that straight and contra-angle handpieces, endodontic motors, ultrasonic scalers and ultrasonic scaler tips form part of the market for small dental equipment.

IV.5.1.3. Past decisional practice

(41) In Bridgepoint/EdRCP24, the Commission found that the market for small dental equipment concerns common day-to-day dental care and could cover ultrasound instruments used for orthodontics, implants, tartar removal, mini leds used for orthodontics, aesthetic dental care, dentures, polishers and preventive tartar removal, sterilizers, bistouries, micromotors and accessories.

IV.5.1.4. Results of the market investigation and Commission's assessment

(42) For the purposes of the present case, it is not necessary to determine whether straight and contra-angle handpieces, endodontic motors, ultrasonic scalers and ultrasonic scaler tips form part of the market for small dental equipment or these segments constitute separate relevant product markets since the Transaction does not raise competition concerns in these areas under any plausible alternative market definition.

IV.5.2. Geographic market definition

IV.5.2.1. The Notifying Party's view

(43) The Notifying Party submits that the market is at least EEA-wide in scope, because all major competitors, including the Parties, usually have one manufacturing facility which serves the whole EEA territory, transport costs are negligible and prices and regulatory approvals are uniform across EEA Member States.

23 Root canals and their associated pulp chamber are the physical hollows within a tooth that are naturally inhabited by nerve tissue, blood vessels and other cellular entities which together constitute the dental pulp. Endodontic therapy involves the removal of these structures, the subsequent shaping, cleaning, and decontamination of the hollows with small files and irrigating solutions and the obturation (filling) of the decontaminated canals with an inert filling such as gutta-percha and typically a eugenol-based cement.

24 Case M.7309 Bridgepoint/EdRCP, recital 16.
IV.5.2.2. Past decisional practice

(44) In Bridgepoint/EdRCP, the Commission left open whether the geographic scope of the market for small dental equipment is national or EEA.

IV.5.2.3. Results of the market investigation and Commission's assessment

(45) For the purposes of the present case, it is not necessary to define the precise scope of the relevant geographic market for small dental equipment since the Transaction will not give rise to anticompetitive effects under any plausible alternative geographic market definition.

V. COMPETITIVE ASSESSMENT

V.1. Horizontal overlaps

V.1.1. Dental CAD/CAM materials

V.1.1.1. Introduction

(46) In CAD/CAM materials, the Parties are active in the supply of zirconia CAD/CAM blocks and discs and glass ceramic CAD/CAM blocks. An affected market arises only in respect to sales of zirconia CAD/CAM blocks and discs in Germany, with a combined market share of [20-30]% (Dentsply [10-20]% and Sirona [0-5]%). In the EEA, the Parties have a combined market share of [5-10]% and the share increment is low (Dentsply [5-10]% and Sirona [0-5]%).

V.1.1.2. The Notifying Party's view

(47) The Notifying Party submits that the market is fragmented and competitive with a large number of competitors including Ivoclar Vivadent, Zirkonzahn, Amann Girrbach, Vita Zahnfabrik, Yenadent, 3M ESPE and others. Furthermore, zirconia CAD/CAM blocks and discs account for approximately 70% of the total CAD/CAM materials that are used in laboratories and face strong competition mainly from alternative ceramic materials.

V.1.1.3. Results of the market investigation and Commission's assessment

(48) Taking into account the Parties' combined low market shares and the presence of several strong players in this market, no competition concerns arise for zirconia CAD/CAM blocks and discs as to the compatibility of the proposed Transaction with the internal market.

25 Case M.7309 Bridgepoint/EdRCP, recitals 21-23.
26 Sirona currently sources its CAD/CAM materials from third party suppliers; it sells the CAD/CAM materials under the Sirona brand for use with its CAD/CAM systems but not as a standalone product for use with third party CAD/CAM systems.
27 Zirconia CAD/CAM blocks and discs are not further sub-segmented for the purpose of this decision, because Dentsply only produces zirconia CAD/CAM discs and Sirona only produces zirconia CAD/CAM blocks, therefore further sub-segmentation would eliminate the horizontal overlap.
V.1.2. Small dental equipment

Endodontic motors

V.1.2.1. Introduction

(49) Affected markets technically arise at the EEA wide and national levels of most EEA countries where the Parties are present (the Parties’ activities overlap and lead to affected markets in Croatia, Cyprus, Denmark, Estonia, Finland, Poland, Romania and Spain). However, this is almost entirely due to the high market share of Dentsply, as Sirona has negligible presence in the EEA (in the overall market of EUR [40-50] million). Sirona has an estimated EEA market share of [0-5]% and in every Member State where the Parties’ activities overlap Sirona’s share is below [0-5]% (with the exception of Cyprus where it has an estimated market share of [5-10]%). Dentsply’s market share ranges between [20-30]% in Cyprus to [50-60]% in Poland, with an EEA market share of [30-40]%.

(50) The only countries where the Parties’ activities overlap in a more substantial way are Croatia (Dentsply: [30-40]%, Sirona: [0-5]%, combined: [30-40]%) and Cyprus (Dentsply: [20-30]%, Sirona: [5-10]%, combined: [20-30]%). However, in 2014, Sirona only made sales of EUR [2 000-4 000] in Croatia and EUR [5 000-7 000] in Cyprus.

V.1.2.2. The Notifying Party’s view

(51) The Notifying Party submits that there is strong competition on the market from a number of companies including NSK, J.Morita, W&H/Sendoline and Micro-Mega/Sanavis.

V.1.2.3. Results of the market investigation and Commission’s assessment

(52) The participants to the market investigation expressed no concerns when asked about their views concerning the horizontal overlap in endodontic motors.

(53) In view of the small increments, a number of competitors which will be present on the market and exert competitive constraint after the Transaction and the fact that no competition concerns were expressed during the market investigation, the Commission concludes that no competition concerns arise for endodontic motors as to the compatibility of the proposed Transaction with the internal market.

Contra-angle handpieces

V.1.2.4. Introduction

(54) Sirona sells approximately [20-30]% of its contra-angle handpieces together with its treatment centres and approximately [60-70]% of Sirona’s contra-angle handpieces are sold via dealers as spare part items for both its treatment

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28 In Italy, Poland, Romania, Spain and the Nordic region, Sirona’s market share is below [0-5]%.

29 See e-mail questionnaire sent to market participants on 11.01.2016.
centres and the treatment centres of third parties. The remaining approximately [10-20]% is sold to Dentsply for use with its endodontic motors.

(55) Dentsply does not manufacture contra-angle handpieces but sources them from [Dentsply suppliers] in the EEA. Dentsply has very limited sales of standalone contra-angle handpieces, which are sold as spare parts for its endodontic motors.

(56) Technically affected markets arise in Austria, Germany, Italy, Norway (Dentsply: >[0-5]%, Sirona: [20-30]%, combined: [20-30]% in each of those countries); Belgium, Malta, Sweden (increment [0-5]% or less and combined market share below [30-40]% in each of those countries) and Finland (Dentsply: [10-20]%, Sirona: [10-20]%, combined: [20-30]%).

V.1.2.5. The Notifying Party's view

(57) The Notifying Party submits that there is strong competition on the market from a number of companies including W&H, KaVo and NSK.

V.1.2.6. Results of the market investigation and Commission's assessment

(58) The participants to the market investigation expressed no concerns when asked about their views concerning the horizontal overlap in contra-angle handpieces.\(^{30}\)

(59) In view of the small increments, the number of competitors that will be present on the market and exert competitive constraint after the Transaction and the fact that no competition concerns were expressed during the market investigation, the Transaction does not give rise to serious doubts as to its compatibility with the internal market in respect of contra-angle handpieces.

V.2. Conglomerate effects

V.2.1. Chairside CAD/CAM systems and CAD/CAM blocks

V.2.1.1. Introduction

(60) Sirona produces both labside and chairside CAD/CAM systems (“Chairside Economical Restoration of Esthetical Ceramics”, CEREC) and sells, CAD/CAM blocks under a private label (see paragraph V.2.1.2.a). In 2013, Dentsply started production of glass ceramic (high strength glass) CAD/CAM blocks which are compatible and licensed to be used together with CEREC. The Commission considers that chairside CAD/CAM systems and CAD/CAM blocks are largely complementary and closely related, the consumption of one (CAD/CAM blocks) implying the use of the other (CAD/CAM system). The Transaction may therefore give rise to conglomerate effects.

\(^{30}\) See e-mail questionnaire sent to market participants on 11.01.2016.
Conglomerate mergers can give rise to competition problems in specific cases, in particular where the merged entity enjoys strong market power in at least one of the markets concerned, and the merger may create possibilities for exclusionary bundling or tying practices that could disadvantage or foreclose competitors and ultimately lead to them exiting the market, or otherwise significantly impede competition in the markets concerned.\textsuperscript{31}

In the present case, following the Transaction, the Combined Entity will have the ability to manufacture and supply both CAD/CAM chairside systems and CAD/CAM blocks. As a result, the Commission investigated whether there was a serious risk that the Combined Entity would close or make more difficult the access of other blocks manufacturers to the Sirona chairside CAD/CAM system and/or tie both products together.

\textbf{V.2.1.2. The Combined Entity's ability to foreclose}

The Combined Entity's ability to foreclose depends on (i) its ability to leverage its dominant position in chairside CAD/CAM systems, so that competing blocks suppliers cannot be active on the market without access to the Combined Entity's customers and (ii) its position in CAD/CAM blocks and its ability to supply dentists with a sufficiently wide range of blocks in a foreseeable future and take over competing blocks suppliers' sales. Additionally, there should be no contractual or technical obstacles to the implementation of a foreclosure strategy.

\textit{(i) The Combined Entity's position in chairside CAD/CAM systems}

As there is no independent third party market data on chairside CAD/CAM systems available, the market shares provided by the Parties are internal estimates. Sirona’s market share for chairside CAD/CAM equipment in the EEA was approximately [80-90]\% in 2014.\textsuperscript{32} The estimated market shares in individual Member States are as follows:


\textsuperscript{32} The Parties submit that Sirona’s share in labside CAD/CAM equipment does not exceed 20\% in any Member State, except for Slovenia where it has a market share of [20-30]\%. 
Table 1, market shares of Sirona’s chairside CAD/CAM system (CEREC) based on the Parties estimates in 2014

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<th>COUNTRY</th>
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<td>Austria</td>
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<td>Italy</td>
<td>[80-90]%</td>
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<td>Belgium</td>
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<td>Norway</td>
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<td>Czech Republic</td>
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<td>Denmark</td>
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<td>Finland</td>
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<td>Ireland</td>
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(65) Participants to the market investigation confirmed that CEREC is by far the most popular system among dentists. Two competitors produce complete systems similarly to CEREC: Planmeca and Carestream. Other manufacturers are active in the supply of some components (e.g. 3Shape produces only intraoral scanners), but do not offer complete systems.

(66) The market investigation results indicated that a number of dentists are not even aware of the existence of any other competitors in this market. The dentists who are aware of other CAD/CAM systems indicate that those are lagging technologically behind CEREC and are thus not a good alternative. Distributors of chairside systems confirm that there is very weak to no interest among dentists in the competing CAD/CAM systems.

(67) Overall, the market investigation results indicate that Sirona is a dominant provider of chairside CAD/CAM systems. Alternative systems suppliers are not capable of matching the quality and reputation of Sirona.

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33 Sirona has no presence in Iceland, Latvia, Liechtenstein and Malta.
34 Cyprus is the only EEA country where the merged entity has a market share below [60-70]%. In Cyprus [0-5] CAD/CAM systems were sold by the Parties, corresponding to [50-60]% of the market.
35 See replies to an e-mail questionnaire sent to dentists on 18.01.2016.
36 Agreed minutes of a phone call with a customer, 29.01.2016.
37 See replies to an e-mail questionnaire sent to distributors on 18.01.2016.
(68)

(ii) Combined Entity's offering in CAD/CAM blocks

V.2.1.2.a. Introduction

(69) [Information on Sirona production capacity and supply strategy]. According to internal estimates, Sirona’s market share in glass ceramic CAD/CAM blocks in the EEA was approximately [0-5]% in 2014.

(70) Dentsply entered the chairside CAD/CAM block market in 2013 and since then manufactures glass ceramic CAD/CAM blocks for chairside systems under the brand CELTRA Duo. Dentsply holds a licence from Dentsply licensor.

(71) According to internal estimates, Dentsply's market share in glass ceramic CAD/CAM blocks in the EEA was [0-5]% in 2014. Other countries where Dentsply is active include Austria ([0-5]% market share), Belgium ([0-5]%), France ([0-5]%), Germany ([0-5]%), Italy ([0-5]%), Luxembourg ([0-5]%) and the Netherlands ([0-5]%).

(72) Dentsply currently has a very limited range of CAD/CAM blocks compared to its competitors. It has however ongoing development projects aimed at [Details about confidential R&D projects].

(73) The competitors in the glass ceramic CAD/CAM blocks include Ivoclar Vivadent ([80-90]% market share according to the Parties' estimations), VITA Zahnfabrik ([10-20]%), 3M ([0-5]%) and some other, smaller competitors.

V.2.1.2.b. The Notifying Party's view

(74) The Notifying Party submits that any attempted foreclosure strategy of competing CAD/CAM block manufacturers would fail due to resistance from customers, given the lack of the Combined Entity’s strong offer in chairside CAD/CAM blocks. Dentsply's product portfolio in glass CAD/CAM materials is limited, while its main competitor, Ivoclar, offers a wide range of

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38 Sirona started producing zirconia blocks only recently at its San Clemente (California, USA) facility, which is operated by its wholly owned subsidiary CCRI. [Information on Sirona production facility and marketing plans].

39 The Parties submit that in principle, Dentsply’s glass ceramic CAD/CAM blocks are not used in labside CAD/CAM systems. Dental laboratories prefer zirconia CAD/CAM discs, which they can use to generate multiple restorations at the same time, due to the time and cost savings. Therefore, most labside CAD/CAM systems are designed to process zirconia CAD/CAM discs. Also, glass ceramic CAD/CAM blocks are not available in disc shape. [Details about confidential license agreement].

40 Celtra Duo has two levels of translucency (high and low translucency), and is available in five shades, 15 stains and one single size. For comparison, IPS e.max of Ivoclar has five levels of translucency (high translucency, medium translucency, low translucency, medium opacity and high opacity), is available in 24 shades, 43 stains, and seven sizes. [Details about confidential R&D projects].
CAD/CAM materials with a variety of translucency levels, shades and sizes, meeting customers demand. Also, Dentsply’s [0-5]% share is based on [Information on Dentsply’s production capacity], therefore it would not have the ability to supply the additional CAD/CAM blocks necessary in case the system was to be closed to third party suppliers.

(75) The Notifying Party indicates furthermore that Dentsply will need considerable time to develop a product range comparable to that of Ivoclar, as during the [0-5] year period necessary for Dentsply to reach Ivoclar's current offering, Ivoclar and other competitors will be working on developing and improving their own range, thus leaving Dentsply technologically behind.

V.2.1.2.c. Results of the market investigation and Commission's assessment

(76) Based on the results of the market investigation, the Commission considers that Dentsply has the potential to rapidly become an important player in the chairside CAD/CAM blocks, in particular due to the fact that it is currently one of the strongest suppliers of dental materials globally and it recently announced intentions to expand its presence in materials.\footnote{Agreed minutes of phone calls with market participants, 14.01.2016 and 15.01.2016.} Dentsply’s Celtra Duo blocks are in direct competition with the blocks of Ivoclar, Vita and other producers of glass ceramic materials.\footnote{Agreed minutes of phone calls with market participants, 15.01.2016 and 20.01.2016.} One market participant indicated that (after two years after its entry) Celtra Duo blocks are perceived as Ivoclar's closest and strongest competitor.\footnote{Agreed minutes of a phone call with a market participant, 20.01.2016.} There are also important technical advantages to the Celtra Duo blocks which are not offered by other suppliers.\footnote{The dentist has an option to use firing during the production process of the dental prosthesis, but for certain indications it is also possible not to fire the material. In this case the material is less hard, the whole production process is however faster.} Since Dentsply entered the market, it had a steep increase of the sales of CAD/CAM chairside blocks ([Information on Dentsply’s sales]).

(77) The market investigation results furthermore indicated that Dentsply has the ability (including the necessary know-how and resources) to develop a range of CAD/CAM blocks comparable to those offered currently by its competitors in a foreseeable future (within the next [0-5] years).\footnote{Agreed minutes of a phone call with a market participant, 15.01.2016.} The Parties confirmed this time frame and [Details of the investment required].

(78) The Commission considers furthermore, that in case the Parties engaged into gradual customer foreclosure or there were indications that such a foreclosure is likely to take place in the future, it is questionable whether the competitors in the chairside CAD/CAM blocks would continue to invest in research into new technologies. It is likely that they would slow down or even stop innovation in the chairside CAD/CAM block, thus making it easier for Dentsply to match their offering, compete and to apply a successful foreclosure strategy.
In view of the above, the Commission concludes that the Combined Entity has the capability of broadening its offering in CAD/CAM blocks allowing it to engage into a foreclosure strategy in the foreseeable future.

(iii) Absence of obstacles to the implementation of a foreclosure strategy

V.2.1.2.d. Introduction

Currently, CEREC is an open system compatible with a number of CAD/CAM blocks. A potential supplier of blocks for the CEREC system must enter into a licensing agreement with Sirona to have its CAD/CAM blocks listed in the software of CEREC (the block library). A license fee of [10-20]% of block sales is then charged to the block manufacturer by Sirona. Currently Sirona has […] such licensing agreements, including with Dentsply.

V.2.1.2.e. The Notifying Party's view

The Notifying Party argues that any foreclosure strategy would not be possible due to Sirona's legal obligations towards competing CAD/CAM block suppliers. The Parties submit that Sirona is bound by contractual obligations to competing blocks manufacturers and thus cannot foreclose them from the access to its chairside systems for the duration of these agreements. Sirona currently has […] licensing agreements with chairside CAD/CAM block [Information relating to Sirona's licensing agreements].

Furthermore, the Parties indicate that, irrespective of the legal obligations stemming from the licensing agreements, it would not be technically possible to close the CEREC system to the competing CAD/CAM blocks. First of all, the software used in the CAD/CAM system is not automatically updated, therefore the dentist can choose not to run the update and to work with the old version of the software, which would support the current CAD/CAM block producers. Secondly, even if Sirona were to remove certain third-party CAD/CAM blocks from the CEREC menu, this does not mean that the machine would no longer work with those blocks. According to the Parties, users can simply select in the system one of the Combined Entity’s blocks that has similar properties to the block he or she wishes to use, as some CEREC users already do today when they use non-Sirona-authorized “pirate” blocks.

V.2.1.2.f. Results of the market investigation and Commission's assessment

With regard to the argument that the legal obligations would prevent the Combined Entity from foreclosing competing CAD/CAM block suppliers, as explained in paragraph (77), the Combined Entity would require around [0-5] years in order to be able to offer a more complete range of products. Therefore, in Commission's view, the notice periods foreseen in the licensing agreements could allow for a gradual ending of contracts with the other block suppliers, in parallel with the development of Dentsply's own product range. The current contractual obligations towards block manufacturers would not prevent the Combined Entity from closing its system over time.

Furthermore, the participants to the market investigation indicated that even with valid licensing agreements in place post-Transaction, the Parties could
engage in other anticompetitive practices, namely the degradation of interoperability between Sirona's chairside CAD/CAM system and the CAD/CAM blocks of Dentsply's competitors, or the exclusion of other block manufacturers altogether by closing the system or following bundling strategies. Complainants are in particular concerned that the Transaction would reduce competition and innovation in the market for chairside CAD/CAM blocks.\(^{48}\)

(85) There are a number of elements indicating that after the phasing out of the licensing agreements with the competing CAD/CAM block suppliers, a foreclosure strategy can be effectively implemented within a foreseeable timeframe: (i) chairside CAD/CAM equipment is an important long-term investment for dentists (lifetime of [5-15] years); (ii) Sirona has a very strong position in chairside equipment and there is little evidence suggesting that competitors may displace/challenge Sirona and erode its ability to foreclose even after three years; (iii) innovation and development of new products is a feature in these markets, and companies plan product launches years in advance of market entry; (iv) contractual protection of competing block producers is limited in time, so consideration about range expansion by Dentsply can take into account the termination of the licensing agreements with competitors. The licensing agreement with Ivoclar, a company which accounts for [80-90]\% of the market in glass ceramic blocks, has a [0-5] termination notice that would allow the Combined Entity, in the presence of a foreclosure scenario, to foreclose and capture the biggest part of the market by year [0-5].

(86) Furthermore, there are other methods which the Combined Entity could use to impede competitors' access to CEREC, such as limiting exchange of information in case of technical developments of the CAD/CAM system or offering less cooperation with the block manufacturers in research and the development of new blocks.

(87) With regard to the Parties' argument concerning technical barriers to a foreclosure strategy, the dentists contacted during the market investigation indicated that they receive regular updates of the CEREC system (including an updated list of CAD/CAM blocks compatible with the system) and that they as a practice install the newest version available. This is because it not only has the most up to date library of CAD/CAM blocks licensed to be used with the machine, but also includes a number of technical developments and improvements of the system, which allow for a production of better and more precise restorations.\(^{49}\)

(88) Furthermore, dentists indicated a strong preference to use only the licensed CAD/CAM blocks, due to the fact that a license ensures that the quality of the material and its compatibility to be used with CEREC was controlled by Sirona. The dentists indicated that their reputation would suffer a lot if they used an unlicensed block which would lead to problems and dissatisfaction of

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\(^{48}\) Agreed minutes of a phone call with a market participant, 14 January 2016.

\(^{49}\) Agreed minutes of phone calls with customers, 27.01.2016, 28.01.2016 and 29.01.2016.
their patients. According to Sirona’s estimation, currently pirated blocks account only for a small ([0-10]%) share of all blocks used in CEREC systems.

(89) Based on the above, the Commission concludes that the Combined Entity does have the ability to limit or fully foreclose access of other CAD/CAM block manufacturers to the CEREC system.

V.2.1.3. The Combined Entity's incentive to foreclose

(90) The Parties argue that any foreclosure strategy cannot be profitable because it would seriously undermine Sirona’s highly profitable chairside CAD/CAM system business, and it would not be reasonable to take this risk for a low margin CAD/CAM blocks business.

(91) The Commission investigated whether the Combined Entity would have the incentives to foreclose competing CAD/CAM block manufacturers, that is whether such a foreclosure strategy could be profitable.

(92) The assessment focused on evaluating the risk of losing sales of the chairside CAD/CAM system by the Combined Entity and the opportunity to extract profit in case of a foreclosure strategy as well as the economic implications of a possible foreclosure.

(i) Limited risk of losing sales with a closed CEREC system

V.2.1.3.a. The Notifying Party's view

(93) The Notifying Party argues that a hypothetically “closed” chairside CAD/CAM system would lose appeal vis-à-vis new customers, having an important impact on new sales of CEREC and harming the Combined Entity’s reputation in the industry. Any attempt to "close" the system and foreclose rival block suppliers would be very detrimental from commercial point of view, as "the certain losses inherent in such a strategy would dwarf its potential gains".

(94) According to the Notifying Party, customers attach great importance to having a wide choice of brands for CAD/CAM blocks, when purchasing a chairside CAD/CAM system. In case of a system closed to the third party blocks, customers would certainly either switch and choose to acquire rival CAD/CAM systems or not purchase a chairside system at all (and continue outsourcing the preparation of dental reproductions to laboratories), limiting chairside systems penetration into the dentists' practices.

V.2.1.3.b. Results of the market investigation and Commission's assessment

(95) The market investigation provided evidence that customers value most the chairside CAD/CAM system, while CAD/CAM blocks play only a secondary role. When selecting the system to purchase, the customers do not take into

50 Agreed minutes of phone calls with customers, 27.01.2016 and 29.01.2016.
51 Parties' submission of 31 January 2016.
account the types of blocks compatible with it (even though they value a large number of block providers), but look at the technical specificities of the system itself, precision and the quality of dental reproductions which can be produced using the system.  

(96) On the CAD/CAM block side, participants to the market investigation indicated that they mostly value technical aspects of the blocks, such as material used, available shades, use indications, size etc. but that, contrary to the Parties' submission, the brand of the block itself does not seem to play a major role in the choice of blocks.  

(97) Dentists also value the speed and facility of using the chairside CAD/CAM system as opposed to the use of the labside CAD/CAM system. In view of the technological improvement and costs savings attributable to using the chairside CAD/CAM system, as well as the size of the investment for a chairside system, it cannot be concluded that the labside CAD/CAM system is an alternative. The results of the market investigation point to a strong preference of the dentists to use the chairside CAD/CAM system over labside not only for cost related reasons but also because it cuts the time necessary to create a dental restoration, reduces the required number of visits by a patient and eliminates the need to make a temporary dental reconstruction. Therefore, it is unlikely that the dentists interested in a chairside CAD/CAM system would easily switch back to or stay with the labside CAD/CAM system because of an increase in blocks' prices or limited choice regarding the number of blocks suppliers (and provided that the available product range remains satisfactory to them). 

(98) Finally, in view of the lack of competitors in the market for chairside CAD/CAM systems, dentists willing to use the chairside CAD/CAM system solution would have no real alternative to continue using CEREC. Indeed, the results of the market investigation point to a very weak competitive landscape in the area of chairside CAD/CAM blocks. Apart from Sirona, there are only two competitors, Carestream and Planmeca, which however seem to be lagging far behind Sirona, both in terms of technical development and market shares (which are marginal). Market participants do not see them as viable alternatives, and a number of dentists are not even aware of the fact that other chairside CAD/CAM systems than CEREC exist on the market. A dentist indicated: "CEREC is the most technically developed system and there is not much choice on the market."  

(99) Therefore, it is likely that if the Combined Entity developed a range of blocks technically comparable to those offered currently by its competitors, its loss of sales of new CAD/CAM systems would be limited in case it engaged into a foreclosure strategy towards competing CAD/CAM block suppliers.

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52 See replies to e-mail questionnaires sent to distributors and dentists on 18.01.2016 and agreed minutes of phone calls with customers, 27.01.2016.
53 Ibid.
54 See agreed minutes of a phone call with a customer, 27 January 2016.
(ii) Opportunity to extract profit from CAD/CAM blocks sales

(100) The Notifying Party submits that the Combined Entity would not be able to raise its prices for blocks substantially, even assuming that it would close the system, and therefore a foreclosure theory, with a risk of losing even a small proportion of new customers, cannot be profitable.

(101) However, the results of the market investigation indicated that customers are not price sensitive when purchasing CAD/CAM blocks.\(^{55}\)

(102) First, the [10-20]\% licensing fee imposed by Sirona on block producers indicates that it is possible to profitably raise the price of CAD/CAM blocks from the point of view of the CAD/CAM systems’ supplier.

(103) Second, in view of the importance of the investment in a CAD/CAM system which has a life-time of [5-15] years (EUR [\(\ldots\)]), the market investigation results indicated that dentists having already bought the system will not consider changing it if the prices of CAD/CAM blocks (which currently cost around EUR [\(\ldots\)]) were to increase even substantially by more than [\(\ldots\)].\(^{56}\)

(104) Third, dentists confirmed that they could pass on a possible price increase of CAD/CAM blocks to patients. As patients pay for the cost of the overall treatment, they would have no way to disentangle a price increase of a few Euros representing a small proportion in their final invoice.\(^{57}\)

(105) In view of the dominant position of Sirona in the CAD/CAM system, the fact that the dentists are bound to the CAD/CAM system for many years due to the high upfront investment and lack of price sensitivity with regard CAD/CAM blocks among dentists, the Combined Entity would have the incentive to raise prices and extract additional profits from CAD/CAM block sales in case it engaged into a foreclosure strategy.

(iii) Economic considerations

\[\text{V.2.1.3.c. The Notifying Party's view}\]

(106) The Notifying Party submitted a simulation on the basis of which it argues that the Combined Entity would not have an incentive to engage in a foreclosure strategy post-merger.\(^{58}\) In particular, the Notifying Party assessed whether a full foreclosure of third-party manufacturers of chairside CAD/CAM blocks would be profitable over the period 2016-2030.\(^{59}\) In the simulation, the profitability of a foreclosure strategy depends on the size of the profit gained in respect of chairside CAD/CAM blocks (from increased

\(^{55}\) See agreed minutes of phone calls with customers, 27 January 2016.

\(^{56}\) See agreed minutes of phone calls with customers, 27 January 2016 and replies to an e-mail questionnaire sent to dentists, 18.01.2016.

\(^{57}\) The cost of a block is in the range of 20 Euro, and a typical treatment is likely to cost patients several hundred Euros. See also agreed minutes of phone calls with customers, 27.01.2016.


\(^{59}\) The potential gains and losses from a foreclosure strategy are discounted using the Sirona's weighted average cost of capital ([10-20]\%).
sales diverted from rivals to the Combined Entity), compared with the lost profit on the chairside system (from a reduction of Sirona's CAD/CAM system sales as some customers would not accept to use exclusively Dentsply's CAD/CAM blocks and from a reduction of Sirona's licensing revenue from third-party block manufacturers).

(107) As regards the supply of chairside CAD/CAM systems, the loss from a foreclosure strategy depends mainly on two parameters:

a. The gross margin on chairside CAD/CAM systems of EUR [...] per unit, corresponding to a [...]% gross margin;\(^\text{61}\)

b. The assumption that the Combined Entity would lose [10-20]% of its customers of chairside CAD/CAM system.

(108) In addition, a foreclosure strategy would lead to a loss of licencing revenues from third party CAD/CAM block manufacturers selling CAD/CAM blocks compatible with the chairside CAD/CAM system of Sirona. In the model submitted by the Notifying Party, the licencing revenue per CAD/CAM block is assumed to be EUR [0-5] per block.

(109) As regards the supply of CAD/CAM blocks, the gain from a full foreclosure strategy depends mainly on three parameters:

a. The Combined Entity would need to expand substantially Dentsply's capacity to supply CAD/CAM blocks by [Information on Dentsply’s development capacity].

b. The gross margin for CAD/CAM blocks around EUR [...] per block, corresponding to a wholesale price of EUR [...] (i.e. a [...]% gross margin). This gross margin corresponds to the situation post-merger where Dentsply would not pay anymore the licencing fee to Sirona (around EUR [...] per block, see paragraph (107)). The corresponding margin pre-merger is therefore EUR [...] per block (i.e. a [...]% gross margin).

c. The market size of the market for chairside CAD/CAM blocks is around [0-5] million units in 2019 and [0-5] million units from 2021 onwards. The Notifying Party also ran a robustness analysis by increasing the market size to [0-5] million units in 2018, followed by an [5-10]% growth up to 2021 and a constant market size of [0-5] million units after 2021.

(110) Under these parameters, a full foreclosure strategy would not be profitable for the Combined Entity with a negative net present value of EUR [...]
million in 2016 prices, corresponding to a gain of EUR […] million and a loss of EUR […] million.62

(111) The Notifying Party also submitted an addendum with some revised calculations for the margins of CAD/CAM blocks, estimated at EUR […] pre-merger ([…]% gross margin) with a licencing fee per block at EUR […].. The corresponding post-merger margin of the Combined Entity would therefore be EUR […] post-merger with the recoupment of the licence fee not paid by Dentsply to Sirona. With these modifications, a full foreclosure strategy would not be profitable with a negative net present value of EUR […] million.

V.2.1.3.d. Results of the market investigation and Commission's assessment

(112) While the Commission considers that the economic framework proposed by the Notifying Party is not unreasonable, in the context of the present case a significant number of assumptions have to be combined to obtain the net gain from a foreclosure strategy, each of which is subject to significant uncertainty.

(113) First, the Commission considers that the investment of EUR [10-15] million overestimates the investment required to implement a full foreclosure of the chairside CAD/CAM block market, estimated by the Notifying Party at [0-5] million units by 2021. The Notifying Party recognises that, absent the merger, Dentsply would have invested [Information on Dentsply development projects].63 Based on this, the Commission considers that only half of the EUR […] million investments should be considered as being specific to the implementation of a full foreclosure strategy.

(114) Moreover, the Notifying Party mentions that [30-40]% of its investment should be attributed to the EEA.64 Based on this, the Commission considers that the investment which is specific to the foreclosure strategy in the EEA is around EUR [0-5] million.65 This is significantly below the investment of EUR [5-15] million used in the model by the Notifying Party(109)a. Considering an investment of EUR [0-5] million would lead to a substantial increase in the profitability of a foreclosure strategy.

(115) Second, the Commission has some doubts on the level of the gross margin for CAD/CAM blocks used in the model for the following reasons:

(116) There have been significant changes in the gross margins for CAD/CAM blocks over the various Parties' submissions in the course of the market investigations. The pre-merger margin was set at EUR […] per block in the initial submission on 24 January 2016 (corresponding to a post-merger margin of EUR […])), then revised to EUR […] per block in the submission

63 See response to the RFI of 01.02.2016, question 1.
64 See response to the RFI of 01.02.2016, question 2.
65 In the Excel file provided by the Notifying Party, the level of investment would be EUR [0-5] million in current term (the difference with EUR [0-5] million mentioned in the paragraph is due to rounding).
of 28 January 2016 (corresponding to a post-merger margin of EUR […]), and finally set at EUR […] per CAD/CAM block in the response to the RFI dated 1 February 2016 (corresponding to a post-merger margin of EUR […]).

(117) While the Parties have provided a breakdown of the different costs related to the margin calculation, there is no explanation of the different types of costs. In particular, while the Commission recognises that the fixed overhead cost and scrap adjustment have been excluded from the margin calculations, the Commission has doubts on the variable nature of other cost items and whether they should be included in the margin calculations. Moreover, in the margin calculations submitted, the Commission notes that the net price has decreased from EUR […] per block to EUR […] per block. This substantial change has not been explained by the Notifying Party.

(118) The Commission has also compared the margins used in the economic model with the ones mentioned in a financial report that analyses the pricing of CAD/CAM blocks by Dentsply. This financial report mentions a cost improvement of EUR […] per CAD/CAM block by […]. This substantial cost improvement (close to a decrease of […]% of the cost) would lead to a significantly higher margin. This cost improvement is not included in the model used by the Notifying Party, which therefore under-estimates the margin for CAD/CAM blocks and therefore the potential gain from foreclosing the market for CAD/CAM blocks.

(119) The Commission also notes that in the financial report, a […]% gross margin is mentioned for chairside CAD/CAM blocks. This is substantially different from the […]% gross margin used in the economics model provided by the Notifying Party and from the […]% gross margin mentioned in the response to the RFI dated 1 February 2016.

(120) Last, following a full-foreclosure strategy, the Combined Entity would become a monopolist in the market for chairside CAD/CAM blocks, which is likely to lead to a price increase. This is not included in the model provided by the Notifying Party, which therefore underestimates the potential gain from a foreclosure strategy.

(121) Therefore, the Commission was not in a position to verify the accuracy of the gross margin for blocks used in the economic model. Given the importance

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66 See response to the RFI of 01.02.2016, question 5.
67 For example, depreciation, PM loss, and scrap (see Figure 1 of the response to the RFI dated 01.02.2016).
68 See Table 1 of the submission dated 28.01.2016.
69 See Annex 3 to the response to the RFI of 01.01.2016.
70 See Annex 2 of the response to the RFI of 01.02.2016.
71 See Annex 2 of the response to the RFI of 01.02.2016, slide 3.
72 See Annex 2 of the response to the RFI of 01.02.2016, slide 5.
73 [Information on margins].
74 While an increase in the market price will also lead to a decrease in the overall demand for CAD/CAM blocks, this second effect is likely to be limited given the low sensitivity to prices of the demand for CAD/CAM blocks, as indicated by the customers during market investigation (see replies to e-mail questionnaires sent to distributors and dentists on 18.01.2016 as well as agreed minutes of phone calls with customers, 27.01.2016).
of this parameter to determine the profitability of a foreclosure strategy, the Commission has doubts on the reliability of the results provided by the Notifying Party.

(122) Third, the Notifying Party assumes that the market size of the market for CAD/CAM blocks is around [0-5] million units in 2019 and [0-5] million units from 2021 onwards. The Notifying Party also ran a robustness analysis by increasing the market size to [0-5] million units in 2018, followed by a [5-10]% growth up to 2021 and a constant market size of [0-5] million units after 2021. However, the assumption of the Notifying Party on the market size for CAD/CAM blocks is contradicted by some qualitative evidence, indicating a significantly higher market size of [0-5] or more million units in 2014-2015, with a growth rate between [5-10]% and [10-20]%.

Therefore, by using a relatively low market size for CAD/CAM blocks, the Notifying Party's model underestimates the potential gain from a foreclosure strategy.

(123) Fourth, the Commission has some doubts on the level of the gross margin for chairside CAD/CAM system used in the model for the following reasons. Based on the response to the RFI dated 1 February 2016, question 3, the Commission understands that the gross margin is actually EUR [...] per chairside system, corresponding to a EUR [...] net margin. The Commission notes that the Notifying Party did not provide the different cost items included in the gross and net margins. Therefore, the Commission is not in a position to conclude that all the relevant cost elements are included in the gross margin used by the Notifying Party. Given the importance of this parameter to determine the profitability of a foreclosure strategy, the Commission has doubts on the reliability of the results provided by the Notifying Party.

(124) Fifth, the Notifying Party assumes that it would lose [10-20]% of Sirona's customers of the chairside CAD/CAM system with a full foreclosure strategy. Given the importance of Sirona to provide the chairside CAD/CAM system and the lack of alternatives for customers, it is also plausible that the Combined Entity would lose instead [5-10]% of its customers of chairside CAD/CAM systems with a foreclosure strategy. This would decrease substantially the cost of a foreclosure strategy.

(125) Sixth, the Commission also notes that there is a set of assumptions under which a foreclosure strategy would be profitable. [...] , [...] , [...] .

(126) Last, the Notifying Party presents the result of a numerical simulation by assuming that even under the assumption of no customer loss of chairside


\[76\] See replies to the RFI "Questions to block manufacturers" sent to the market participants on 28.01.2016.

\[77\] The Parties uses a EUR [...] margin (see paragraph 111). An increase in the margin by EUR 1 to EUR [...] for dental blocks seems reasonable, based on the considerations discussed in paragraphs 116-122.

\[78\] See paragraph 123.

\[79\] Given the lack of detailed information on the margin calculations for the chairside CAD/CAM system (see paragraph 122), the Commission has taken the average of the gross margin of [...] and the net margin of [...] leading to EUR [...] margin.
system (i.e. no loss of profit from the sale of chairside system), a full foreclosure strategy would still not be profitable for the Combined Entity, with a loss of EUR – […] million. The Commission notes that this result implies that expansion in the market for CAD/CAM blocks is not profitable, which is in contradiction with a positive gross margin of Dentsply. The Commission considers that this result casts further doubts on the reliability of the results from the numerical simulations.

The Commission concludes that the results of the economic model provided by the Notifying Party are subject to significant uncertainty. In particular, the Commission was not in a position to verify the accuracy of the margins used by the Notifying Party: the Notifying Party has overestimated the required investment to implement a foreclosure strategy and underestimated the market size for chairside CAD/CAM blocks, and there exists a reasonable set of assumptions under which a foreclosure strategy would be profitable. Therefore, the Commission considers that the results of the economic model provided by the Notifying Party are not sufficiently reliable to exclude that a foreclosure strategy by the Combined Entity would be unprofitable.

V.2.1.4. Negative effects of the potential foreclosure

In case the Combined Entity engaged into a foreclosure strategy, i.e. closed Sirona’s CAD/CAM system to competing CAD/CAM block suppliers, the main negative effect would be a likely increase in prices of CAD/CAM blocks. The Combined Entity, having a dominant and in some countries nearly monopolistic position in the chairside CAD/CAM systems, would be able and willing to raise prices of CAD/CAM blocks. The results of the market investigation confirmed that customers of CAD/CAM blocks (dentists) are not price sensitive and are able to pass price increases on to the final consumers (patients). Final consumers purchasing the dental treatment are not aware of the cost breakdown for the treatment they receive, and are therefore not in the position to disentangle the price of the blocks from the overall price of the service they receive. These factors indicate that price increases are likely to occur, with little possibility for customers to oppose them.

Another negative effect could take place over time, once the foreclosure strategy has been successfully implemented. At that point in time Dentsply would have no competing block providers, and therefore its incentive to innovate would be weaker. Currently block manufacturers compete with each other mainly through using innovative solutions, such as new and better materials. If Dentsply became the only supplier of CAD/CAM blocks for the CEREC system, its incentive to invest in innovation would diminish, although it would not disappear given the importance attributed to quality and innovation by customers.

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80 See "Dentsply/Sirona: evaluating the incentive to foreclose rival manufacturers of blocs for chairside CAD/CAM systems", RBB Economics, 24 January 2016, Table 3.
81 The Commission notes that this result is driven by the loss of the licensing revenue from third party block manufacturers (see paragraph 106 b). However, this loss should be compensated by the higher margin made by the merged entity on dental blocks (see paragraph 108 b), such that these two effects should be neutral.
V.2.1.5. Conclusion

(130) In conclusion, in the light of the arguments set out in sections V.2.1.2 to V.2.1.4, the results of the market investigation and of the other information available to the Commission, the Commission considers that the Combined Entity would have the ability and incentive to foreclose suppliers of CAD/CAM blocks for its CAD/CAM chairside systems and that such foreclosure would likely have negative effects on competition. As a result, the Transaction raises serious doubts as to its compatibility with the internal market in the neighbouring markets for the production of CAD/CAM systems and CAD/CAM blocks.\(^{82}\)

V.2.2. Treatment centres and small dental equipment

V.2.2.1. Introduction

(131) Sirona manufactures treatment centres and Dentsply manufactures small dental equipment (endodontic motors, contra-angle handpieces and other materials) which can be used alongside the treatment centres.

(132) Sirona estimates its market share across EEA at less than [20-30]%, however in a number of countries the market share exceeds [30-40]% (Austria [40-50]%, Belgium [30-40]%, Germany [40-50]%, Iceland [40-50]%, Luxembourg [30-40]% and Netherlands [30-40]%).

(133) Dentsply's market share in endodontic motors is of [30-40]% in the EEA, and ranges at national level between [20-30]% in Cyprus to [50-60]% in Poland. The Notifying Party submits that in the EEA, Dentsply, with its estimated [30-40]% share of sales, faces strong competition in the endodontic motors segment from companies such as NSK ([…]), J.Morita, W&H/Sendoline and Micro-Mega/Sanavis with estimated shares of sales in the EEA of [20-30]%, [10-20]%, [5-10]% and [5-10]%, respectively.

(134) The competitors in the treatment centres include global players such as Adec, Cefla, Belmont, Danaher Corporation through its subsidiary KaVo, Planmeca and J.Morita, but also regional and local manufacturers.

V.2.2.2. The Notifying Party's view

(135) The Notifying Party submits that treatment centres and small dental equipment are not sourced at the same time. Treatment centres are a capital investment and only need to be bought very infrequently (i.e. every [10-20] years). Dental equipment however needs to be replaced on a more regular basis. Currently, Dentsply’s endodontic motors are designed as standalone products and sold on a standalone basis and are not bundled with treatment centres.

(136) The Notifying Party submits that the Combined Entity will not have the market power in either market to pursue any foreclosure strategy.

\(^{82}\) For the sake of clarity, antitrust rules, in particular Article 102 TFEU, will continue to apply to the Combined Entity after the closing of the proposed transaction, regardless of the outcome of the present assessment under the Merger Regulation.
Furthermore, the success of the treatment centres depends to a large extent on its interoperability with other manufacturers’ small dental equipment.

V.2.2.3. **Results of the market investigation and Commission's assessment**

(137) The participants to the market investigation expressed no concerns when asked about their views concerning the vertical relationship between treatment centres and small dental equipment.  

(138) In view of the lack of concerns expressed by the participants to the market investigation, the large number of competitors both in treatments centres and endodontic motors as well as the moderate market shares of the Parties EEA-wide and in most countries, the Commission concludes that the Transaction does not give rise to serious doubts as to its compatibility with the internal market in respect of the vertical relationship between the production of treatment centres by Sirona and sales of small dental equipment by Dentsply.

V.2.3. **Endodontic motors and contra-angle handpieces**

V.2.3.1. **Introduction**

(139) Dentsply sells endodontic motors which have a contra-angle handpiece included. It manufactures approximately [50-60]% of the endodontic motors it sells in the EEA itself and sources the rest from the [Dentsply suppliers]. Dentsply does not manufacture contra-angle handpieces. The contra-angle handpieces that Dentsply sold together with its endodontic motors in 2014 were sourced from [Dentsply suppliers].

(140) As mentioned in paragraph (54), Sirona manufactures contra-angle handpieces which it sells either with its treatment centres or via dealers, as spare part items for both its treatment centres and the treatment centres of third parties or to Dentsply for use with its endodontic motors.

(141) Contra-angle handpieces may thus be sold alongside endodontic motors. The two sets of products could therefore be regarded as “complementary”. The possible anticompetitive strategies would include preventing supplying contra-angle handpieces to third party endodontic motors manufacturers or bundling the two products.

V.2.3.2. **The Notifying Party's view**

(142) The Notifying Party argues that in view of a number of strong competitors active in endodontic motors exercising competitive constraint (including NSK, J.Morita, W&H/Sendoline and Micro-Mega/Sanavis), a number of competitors active in contra-angle handpieces (KaVo, W&H and NSK) as well as moderate market shares of the Parties ([30-40]% at EEA level and maximum [50-60]% in Poland for Dentsply and for Sirona [10-20]% at EEA level and below [30-40]% in each of the Member States for Sirona), any foreclosure scenarios are not achievable.

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83 See e-mail questionnaire sent to market participants on 11.01.2016.
Furthermore, Dentsply’s competitors, to the extent that they do not manufacture contra-angle handpieces, have so far not purchased their contra-angle handpieces from Sirona but have sourced them from Sirona’s competitors. So, even if the Combined Entity refrained from supplying contra-angle handpieces to third party endodontic motor manufacturers, this would not make any difference to the purchase patterns of Dentsply’s competitors with respect to contra-angle handpieces. In addition, if the Combined Entity relied exclusively on Sirona for the supply of contra-angle handpieces, this would even free up capacity on the part of the remaining contra-angle handpiece suppliers from which Dentsply used to purchase before ([Dentsply suppliers]).

Moreover, NSK and W&H manufacture both contra-angle handpieces and endodontic motors but also sell contra-angle handpieces to other competitors, […], in the endodontic motors segment. The fact that NSK and W&H have not stopped supplying contra-angle handpieces to third parties demonstrates that it is not commercially rational to adopt a foreclosure strategy.

The combination of Dentsply’s endodontic motors with Sirona’s contra-angle handpieces will not give any particular advantage to Dentsply vis-à-vis its competitors in endodontic motors. Contra-angle handpieces are commoditized products that do not have any impact on the core technology of an endodontic motor and therefore do not drive the sales of endodontic motors.

In addition, the Parties estimate that in the EEA only [5-10]% of all contra-angle handpieces are supplied to endodontic motor manufacturers for use alongside their endodontic motors in endodontic procedures. The vast majority of contra-angle handpieces is sold to treatment centre manufacturers or as spare part items for treatment centres. This means that the contra-angle handpiece suppliers do not focus their sales strategies on endodontic motor manufacturers since they account for only a small portion of the total customer base for their products.

For all the above reasons, the Parties submit that the Combined Entity will not have the ability or incentive to pursue a foreclosure strategy.

V.2.3.3. Results of the market investigation and the Commission’s assessment

The participants to the market investigation expressed no concerns when asked about their views concerning the relationship between endodontic motors and contra-angle handpieces.⁸⁴

In view of the moderate market shares of the Parties EEA-wide and in most countries, large number of competitors which will exert competitive pressure on the Combined Entity post-Transaction, and the fact that no concerns were expressed during the market investigation, the Commission concludes that the Transaction does not give rise to serious doubts as to its compatibility with the internal market in respect of the vertical/conglomerate relationship between the production of endodontic motors by Dentsply and the production of contra-angle handpieces by Sirona.

See e-mail questionnaire sent to market participants on 11.01.2016.

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VI. PROPOSED REMEDIES

VI.1. Description of the Commitments initially submitted

(150) In order to render the concentration compatible with the internal market, the Parties submitted a set of Commitments on 4 February 2016.

(151) Pursuant to the first Commitments proposed by the Parties, the Combined Entity committed to offer to each Licensed Third Party Block Manufacturer that it shall be able to continue to supply its Licensed Third Party CAD/CAM Blocks under the terms of their Existing Licensing Agreements until 1 January 2022, all other contractual terms remaining the same. In practice this meant that any cooperation with the CAD/CAM block manufacturers could be terminated on 1 January 2022 at the earliest.

(152) The Parties kept the ability to alter the CEREC software functionality in order to correct bugs or other implementation issues.

(153) Third Party CAD/CAM Blocks could be removed from the CEREC Block Catalogue Function in accordance with the terms of the applicable Existing License Agreement with Sirona, and after the completion of the Transaction, the combined entity, and the Licensed Third Party Block Manufacturer, or upon the request of the latter.

(154) The proposed remedies foresaw that any possible disputes should be resolved in accordance with the terms of the Existing License Agreements.

(155) The Commission assessed the appropriateness of the Commitments offered on 5 February 2016 in the light of the principles underlying its remedies policy and carried out a market test.

VI.2. Compatibility with the remedies policy principles

VI.2.1. Principles

(156) Where a notified concentration raises serious doubts as to its compatibility with the internal market, the Parties may modify the notified concentration so as to remove the grounds for the serious doubts identified by the Commission with a view to having it declared compatible with the internal market pursuant to Article 6(1)(b) in conjunction with Article 6(2) of the Merger Regulation.

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85 "Licensed Third Party Block Manufacturer" refers to the [...] CAD/CAM block manufacturers with whom Sirona has an Existing License Agreement.
86 "Licensed Third Party CAD/CAM Block" means a CAD/CAM Block manufactured by a Licensed Third Party Block Manufacturer.
87 "Existing License Agreement" means any license agreement with a Licensed Third Party Block Manufacturer that is effective in the European Economic Area.
88 "CEREC Block Catalogue Function" means the catalogue of Licensed Third Party CAD/CAM Blocks that CEREC system users must select from in order to mill their restoration.
(157) As set out in the Commission Notice on Remedies, commitments have to eliminate the Commission's serious doubts entirely, they have to be comprehensive and effective from all points of view and they must be capable of being implemented effectively within a short period of time, as the conditions of competition on the market will not be maintained until the commitments have been fulfilled.

(158) In assessing whether or not commitments will restore effective competition, the Commission considers their type, scale and scope by reference to the structure and the particular characteristics of the market in which the Commission has identified serious doubts as to the compatibility of the notified concentration with the internal market.

(159) Divestitures or the removal of links with competitors are the preferred remedy to eliminate certain competition concerns and Commitments relating to the future behaviour of the Combined Entity may be acceptable only exceptionally in very specific circumstances. In any case, divestitures are the benchmark for other remedies in terms of effectiveness and efficiency.

(160) In the conglomerate case at stake, remedies other than divestiture remedies appear best suited to directly address the concerns raised. Indeed, this is a case where the main concern is that Sirona's dominant position in the market for chairside CAD/CAM systems may lead to foreclosure of CAD/CAM blocks manufacturers which need access to Sirona's system in order to compete effectively on the market. The Combined Entity may withhold access to the chairside system, thus raising competition problems. In these circumstances, Commitments to grant competitors access to the CEREC system may eliminate the competition concerns.

(161) The Commitments should guarantee that the CEREC system, in its current form and its future evolution, remains open to competing CAD/CAM block manufacturers, on at least as favourable terms as pre-Transaction.

(162) It has to be further ensured that the terms and conditions under which access to the CEREC system is granted do not impede the effective implementation of such an access remedy. The terms and conditions should be clear and transparent. The Commission will only accept such Commitments if it can be concluded that they will be effective and competitors will likely use them.

VI.2.2. Results of the market test of the remedies and Commission's assessment

(163) The market participants supported the overall scope and nature of the Commitments. Most respondents accepted that the competition concerns in
this case could be solved with Commitments which ensured that the CEREC system remains open to the Licensed Third Party Block Manufacturers.

(164) The market test showed that the remedies as suggested were in principle capable of removing the competition concerns. However, a number of necessary improvements were suggested. The main issues concerned the duration of the proposed remedy, as, in case of some chairside CAD/CAM block providers, the remedy prolonged the contractual arrangements only by two years, which was a very short period of time in an industry requiring intensive research and upfront investment. Although few of the market test respondents considered that the Commitments should have a duration of 15-20 years, 10 years were considered to be a necessary minimum. ⁹⁶

(165) Furthermore, the market test respondents were concerned by the Commitments' lack of specific arrangements with regard to dispute resolution. The existing licensing agreement had different dispute resolution mechanism and, in most cases, there was no explicit provision included in the contract, meaning that any dispute would needed to be resolved in court. A monitoring trustee and a fast track dispute resolution mechanism were seen to be a more appropriate solution. ⁹⁷

(166) In addition, a significant number of respondents expressed strong and substantiated concerns on the design and the formulation of the proposed Commitments. Several stipulations were seen as too vague, general and capable of allowing the Combined Entity to adopt discriminatory and abusive measures by the merged entity. ⁹⁸

(167) The Commission considered that the concerns raised by many of the competitors in the market for CAD/CAM blocks market were appropriate and relevant and therefore conducted further discussions with the Parties in order to address them.

(168) In particular, the Commission agreed that (a) the period of contract extension allowing to end any cooperation with block manufacturers on 1 January 2022 was insufficient, (b) the conflict resolution mechanism as included in the current contracts was insufficient to effective dispute resolution in case the Combined Entity was to break its obligations stemming from the contract and (c) the current Licensing Agreements were very general and included only broad provisions subject to a lot of room for interpretation.

VI.3. Final set of Commitments

(169) Following the communication to the Parties of the outcome of the market test on the first set of Commitments, the Parties submitted a revised set of Commitments on 18 February 2016, which addressed all of the Commission’s remaining concerns that gave rise to serious doubts as to the compatibility of the Transaction with the internal market.

⁹⁶ See replies to question 2 of the market test of the Commitments, sent out on 05.02.2016.
⁹⁷ See replies to question 12 of the market test of the Commitments, sent out on 05.02.2016.
⁹⁸ See replies to questions 16 and 17 of the market test of the Commitments, sent out on 05.02.2016.
More precisely, the Parties agreed to extend the duration of the Commitments to 10 years, stipulating that each Existing License Agreement shall continue to run until 1 March 2026.

The Parties have also substantially improved the enforcement provisions of the Commitments, which now include a fast track arbitration procedure for dispute settlement.

The revised Commitments address the problems identified by the respondents to the market test and include a series of measures to safeguard the rights of Licensed Third Party Block Manufacturers:

a. the Combined Entity will refrain from taking technical or commercial measures that could limit the full and proper usability of the Licensed Third Party CAD/CAM Blocks in order to favour Sirona’s/the Combined Entity’s own CAD/CAM Blocks;

b. the Combined Entity shall continue to provide the Licensed Third Party Block Manufacturers with the necessary know-how to ensure the continued usage of their blocks in the CEREC chairside system;

c. the Combined Entity, shall ensure, to the extent technically feasible and within best commercial efforts, that future technical changes of CEREC system (additions, changes or removal of functionalities) do not discriminate against Licensed Third Party CAD/CAM Blocks in order to favour Sirona’s/the combined entity’s own CAD/CAM blocks;

d. the Combined Entity will put in place all necessary measures (such as firewalls, “clean teams”, etc.) to ensure that the combined entity does not use any confidential commercially/technically sensitive information provided to it by Licensed Third Party Block Manufacturers to favour or develop the Combined Entity’s own CAD/CAM Blocks;

e. the Combined Entity will be able to remove Licensed Third Party CAD/CAM Blocks from the CEREC system only to the extent allowed by the Existing License Agreements.

The Commitments remove the concerns raised during the market investigation as they limit the ability of the Combined Entity to exclude Licensed Third Party Block Manufacturers, or to restrict in any way their continued usage of the CEREC system, until, at least, 1 March 2026.

The Commitments clarify and effectively extend the Licensed Third Party Block Manufacturers’ contractual protections under the Existing License Agreements, thereby eliminating the foreclosure concerns.

Should any Licensed Third Party Block Manufacturer claim that the Combined Entity is failing to comply with its obligations arising from the Commitments, such Licensed Third Party Block Manufacturer will have recourse to the fast-track dispute resolution mechanism contained therein.
(176) By ensuring, subject to the terms and conditions of the Existing License Agreements and consistent with Sirona’s practice pre-Transaction, the future compatibility of the CEREC system with the Licensed Third Party CAD/CAM Blocks, the Commitments ensure the maintenance of effective competition in this market and foster consumer choice by ensuring that Sirona’s suppliers will continue to be able to supply CAD/CAM Blocks for use with CEREC.

(177) In light of the above, the Commission concludes that the Commitments as revised on 18 February 2016 are sufficient to eliminate the serious doubts identified in Section VI (Competitive Assessment).

VII. CONDITIONS AND OBLIGATIONS

(178) Under the first sentence of the second subparagraph of Article 6(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.

(179) The achievement of the measure that gives rise to the 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 no longer stands. Where the undertakings concerned commit a breach of an obligation, the Commission may revoke the clearance decision in accordance with Article 8(6)(b) 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.

(180) In accordance with the distinction described above, all requirements set out in the Commitments are considered to constitute obligations.

(181) The Commission has concluded that the Commitments submitted by the Parties on 18 February 2016 are sufficient to remove the serious doubts raised by the concentration. Accordingly, subject to the full compliance of the Parties and the Combined Entity with the Commitments, the Commission has decided not to oppose the notified operation and to declare it compatible with the internal market and with the EEA Agreement.

(182) The detailed text of the Commitments is annexed to this decision. The full text of the annexed Commitments forms an integral part to this decision.
VIII. CONCLUSION

(183) For the above reasons, the Commission has decided not to oppose the notified operation as modified by the Commitments and to declare it compatible with the internal market and with the functioning of the EEA Agreement, subject to full compliance with the obligations laid down in the Commitments annexed to the present decision. This decision is adopted in application of Article 6(1)(b) in conjunction with Article 6(2) of the Merger Regulation and Article 57 of the EEA Agreement.

For the Commission
(Signed)

Margrethe VESTAGER
Member of the Commission
Pursuant to Article 6(2) of Council Regulation (EC) No 139/2004 (the “Merger Regulation”), Sirona Dental Systems, Inc. (“Sirona”) and DENTSPLY International Inc. (“Dentsply”) (Dentsply and Sirona are jointly referred to as the “Parties” and the acquisition of Sirona is referred to as the “Transaction”) hereby provide the commitments specified below (the “Commitments”) vis-à-vis the European Commission (the "Commission") with a view to rendering the Transaction compatible with the internal market and the functioning of the EEA agreement.

These Commitments shall be interpreted in light of the Commission's decision pursuant to Article 6(1)(b) of the Merger Regulation to declare the Transaction compatible with the internal market and the functioning of the EEA agreement, 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.

These Commitments are subject to and conditional upon the completion of the Transaction.

SECTION A. DEFINITIONS

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

“CAD/CAM Block” means the substrate material in block form used in the CEREC system.

“CEREC” means Sirona’s ‘Chairside Economical Restoration of Esthetical Ceramics’ CAD/CAM system currently marketed under the CEREC brand as it functions at the Effective Date and any enhancement, improvements or successors thereto.

“CEREC Block Catalogue Function” means the catalogue of Licensed Third Party CAD/CAM Blocks that CEREC users must select from in order to mill their restoration.

“CEREC Software Functionality” means any function of any CEREC software component.

“Combined Entity” means the surviving entity upon the completion of the Transaction.

“Effective Date” means the date of the adoption of the Decision.

“Existing License Agreement” means any license agreement with a Licensed Third Party Block Manufacturer that is effective in the European Economic Area.

“Licensed Third Party Block Manufacturer” means a CAD/CAM Block manufacturer with whom Sirona has an Existing License Agreement.
“Licensed Third Party CAD/CAM Block” means a CAD/CAM Block manufactured by a Licensed Third Party Block Manufacturer.

SECTION B. COMMITMENTS

Licensed Third Party Block Manufacturers’ Safeguards

2.1. The purpose of the Commitments is for the Combined Entity to ensure, subject to the terms and conditions of the Existing License Agreements and consistent with Sirona’s practice pre-Transaction, the future compatibility of the CEREC system with the Licensed Third Party CAD/CAM Blocks in particular by refraining from taking technical or commercial measures that could limit the full and proper usability of the Licensed Third Party CAD/CAM Blocks in order to favour Sirona’s/the Combined Entity’s own CAD/CAM Blocks.

2.2. Sirona, and after completion of the Transaction, the Combined Entity, commits to offer to each Licensed Third Party Block Manufacturer that it shall not give notice to terminate any of the Existing License Agreements before the date set out in Annex I to these Commitments, so that each Existing License Agreement shall continue to run until 1 March 2026, all other contractual terms of the Existing License Agreements remaining the same. Annex I sets out the timing for each Existing License Agreement.

2.3. Sirona, and after completion of the Transaction, the Combined Entity, shall continue to provide the Licensed Third Party Block Manufacturers with the necessary know-how to ensure the continued usage of Licensed Third Party CAD/CAM Blocks in CEREC, in line with Sirona’s research, development and commercial policy pre-Transaction and as set out in the Existing License Agreements if applicable.

2.4. Sirona, and after completion of the Transaction, the Combined Entity, shall ensure, to the extent technically feasible and within best commercial efforts1, that future technical changes of CEREC (additions, changes or removal of functionalities) do not discriminate against Licensed Third Party CAD/CAM Blocks in order to favour Sirona’s/the Combined Entity’s own CAD/CAM Blocks.

2.5. The Combined Entity commits to put in place all necessary measures (such as firewalls, “clean teams”, etc.) to ensure that the Combined Entity does not use any confidential commercially/technically sensitive information provided to it by Licensed Third Party Block Manufacturers to favour or develop the Combined Entity's own CAD/CAM Blocks.

2.6. Sirona shall inform in writing (with a copy to the Commission) each Licensed Third Party Block Manufacturer of these Commitments within one week of the Effective Date. The Licensed Third Party Block Manufacturer shall in turn inform Sirona, and after completion of the Transaction, the Combined Entity, of its intention to accept Sirona’s offer by sending a

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1 The term "best commercial efforts" shall be interpreted in light of the Commission's decision pursuant to Article 6(1)(b) of the Merger Regulation to declare the Transaction compatible with the internal market and the functioning of the EEA agreement, the Merger Regulation, and the general principles of EU law. Any interpretation that may be given to this term under the law of other jurisdictions is not relevant for the purpose of interpreting and/or implementing the Commitments.
written notice of acceptance (with a copy to the Commission) within one month of the receipt of Sirona’s offer.

2.7. It is understood that, to the extent allowed by the Existing License Agreements, the Combined Entity shall retain the ability to remove Licensed Third Party CAD/CAM Blocks from the CEREC Block Catalogue Function.

**Fast-Track Dispute Resolution**

2.8. In the event that a Licensed Third Party Block Manufacturer claims that the Combined Entity is failing to comply with its obligations arising from these Commitments, such Licensed Third Party Block Manufacturer may invoke the dispute settlement procedure described in Sections 2.8 – 2.30 et seq.

2.9. It is understood that the arbitration process shall be used only to resolve disputes regarding compliance with the Commitments while any other dispute arising from the Existing License Agreements shall be solved pursuant to ordinary rules under the applicable law of the contract.

2.10. Any Licensed Third Party Block Manufacturer who wishes to avail itself of the fast track dispute resolution procedure (a “Requesting Party”) shall send a written request to the Combined Entity setting out in detail the reasons leading that party to believe that the Combined Entity is failing to comply with the requirements of the Commitments. The Requesting Party and the Combined Entity shall use their best efforts to resolve all differences of opinion and to settle all disputes that may arise through co-operation and consultation within a reasonable period of time not exceeding fifteen [15] working days after receipt of the Request.

2.11. Should the Requesting Party and the Combined Entity (together the “Parties to the Arbitration”) fail to resolve their differences of opinion in the consultation phase, the Requesting Party shall serve a notice (the “Notice”), in the sense of a request for arbitration, to the International Chamber of Commerce (“ICC”), with a copy of such Notice and request for arbitration to the Combined Entity.

2.12. The Notice shall set out in detail the dispute, difference or claim (the “Dispute”) and shall contain, inter alia, all issues of both fact and law, including any suggestions as to the procedure, and all documents relied upon shall be attached, e.g. documents, agreements, expert reports, and witness statements. The Notice shall also contain a detailed description of the action to be undertaken by the Combined Entity.

2.13. The Combined Entity shall, within 10 working days from receipt of the Notice, submit its answer (the “Answer”), which shall provide detailed reasons for its conduct and set out, inter alia, all issues of both fact and law, including any suggestions as to the procedure, and all documents relied upon, e.g. documents, agreements, expert reports, and witness statements. The Answer shall, if appropriate, contain a detailed description of the action which the Combined Entity proposes to undertake vis-à-vis the Requesting Party.
Appointment of the Arbitrators

2.14. The Arbitral Tribunal shall consist of three persons. The Requesting Party shall nominate its arbitrator in the Notice; the Combined Entity shall nominate its arbitrator in the Answer. The arbitrator nominated by the Requesting Party and by the Combined Entity shall, within five working days of the nomination of the latter, nominate the chairman, making such nomination known to the parties and the Arbitral Institution which shall forthwith confirm the appointment of all three arbitrators.

2.15. Should the Requesting Party wish to have the Dispute decided by a sole arbitrator it shall indicate this in the Notice. In this case, the Requesting Party and the Combined Entity shall agree on the nomination of a sole arbitrator within five working days from the communication of the Answer, communicating this to the Arbitral Institution.

2.16. Should the Combined Entity fail to nominate an arbitrator, or if the two arbitrators fail to agree on the chairman, or should the Parties to the Arbitration fail to agree on a sole arbitrator, the default appointment(s) shall be made by the ICC. The three-person arbitral tribunal or, as the case may be, the sole arbitrator, are herein referred to as the “Arbitral Tribunal”. All arbitrators shall have experience and expertise in the area of life sciences technology.

Arbitration Procedure

2.17. The Dispute shall be finally resolved by arbitration under the ICC Rules of Arbitration, with such modifications or adaptations as foreseen herein or necessary under the circumstances (the “Rules”). The arbitration shall be seated in Frankfurt am Main, Germany and be conducted in the German language.

2.18. The procedure shall be a fast-track procedure. For this purpose, the Arbitral Tribunal shall shorten all applicable procedural time-limits under the Rules as far as admissible and appropriate in the circumstances. The Parties to the Arbitration shall consent to the use of e-mail for the exchange of documents.

2.19. The Arbitral Tribunal shall, as soon as practical after the confirmation of the Arbitral Tribunal, hold an organisational conference to discuss any procedural issues with the Parties to the Arbitration. Terms of reference shall be drawn up and signed by the Parties to the Arbitration and the Arbitration Tribunal at the organisational meeting or thereafter and a procedural time-table shall be established by the Arbitral Tribunal. An oral hearing shall, as a rule, be established within two months of the confirmation of the Arbitral Tribunal.

2.20. In order to enable the Arbitral Tribunal to reach a decision, it shall be entitled to request any relevant information from the Parties to the Arbitration, to appoint experts and to examine them at the hearing, and to establish the facts by all appropriate means.

2.21. The Arbitral Tribunal shall not disclose confidential information and apply the standards attributable to confidential information under the Merger Regulation. The Arbitral Tribunal may take the measures necessary for protecting confidential information in particular by restricting access to confidential information to the Arbitral Tribunal and outside counsel and experts of the opposing party.

2.22. The burden of proof in any dispute under the Rules shall be borne as follows:
(a) the Requesting Party must produce evidence of a prima facie case;

(b) if the Requesting Party produces evidence of a prima facie case, the Arbitral Tribunal must find in favour of the Requesting Party unless the Combined Entity can produce evidence to the contrary

**Involvement of the Commission**

2.23. The Commission shall be allowed and enabled to participate in all stages of the procedure by:

(a) receiving all written submissions (including documents and reports, etc.) made by the Parties to the Arbitration;

(b) receiving all orders, interim and final awards and other documents exchanged by the Arbitral Tribunal with the Parties to the Arbitration (including terms of reference and procedural time-table);

(c) filing any Commission amicus curiae briefs; and

(d) being present at the hearing(s) and being allowed to ask questions to parties, witnesses and experts. The Arbitral Tribunal shall forward, or shall order the Parties to the Arbitration to forward, the documents mentioned to the Commission without delay.

2.24. In the event of disagreement between the Parties to the Arbitration regarding the interpretation of the Commitments, the Arbitral Tribunal shall inform the Commission and may seek the Commission’s interpretation of the Commitments before finding in favour of any party to the arbitration and shall be bound by the interpretation.

**Decisions of the Arbitral Tribunal**

2.25. The Arbitral Tribunal shall decide the dispute on the basis of the Commitments and the Decision. The Commitments shall be construed in accordance with the Merger Regulation, EU law and general principles of law common to the legal orders of the Member States without a requirement to apply a particular national system. The Arbitral Tribunal shall take all decisions by majority vote.

2.26. Upon request of the Requesting Party, the Arbitral Tribunal may make a preliminary ruling on the Dispute. The preliminary ruling shall be rendered within one month after the confirmation of the Arbitral Tribunal, shall be applicable immediately and, as a rule, remain in force until a final decision is rendered.

2.27. The Arbitral Tribunal shall, in the preliminary ruling as well as in the final award, specify the action, if any, to be taken by the Combined Entity in order to comply with the Commitments vis-à-vis the Requesting Party (e.g. specify a contract including all relevant terms and conditions). The final award shall be final and binding on the Parties to the Arbitration and shall resolve the Dispute and determine any and all claims, motions or requests submitted to the Arbitral Tribunal. The arbitral award shall also determine the reimbursement of the costs of the successful party and the allocation of the arbitration costs.
In case of granting a preliminary ruling or if otherwise appropriate, the Arbitral Tribunal shall specify that terms and conditions determined in the final award apply retroactively.

2.28. The final award shall, as a rule, be rendered within six months after the confirmation of the Arbitral Tribunal. The time-frame shall, in any case, be extended by the time the Commission takes to submit an interpretation of the Commitments if asked by the Arbitral Tribunal.

2.29. The Parties to the Arbitration shall prepare a non-confidential version of the final award, without business secrets. The Commission may publish the non-confidential version of the award.

2.30. Nothing in the above-described arbitration procedure shall affect the powers of the Commission to take decisions in relation to the Commitments in accordance with its powers under the Merger Regulation.

2.31. The provisions in clauses 2.10 – 2.30 are without prejudice to the possibility for Licensed Third Party Block Manufacturers to resolve disputes in accordance with the terms of the Existing License Agreements.

2.32. Each year, by 1 May at the latest, and until 1 May 2026, the Combined Entity shall send a report to the Commission explaining for every Existing License Agreement how the Commitments in this paragraph 2 were implemented with regards to the prior calendar year.

SECTION C. GENERAL PROVISIONS

3.1. If the Transaction is abandoned, unwound or otherwise terminated, these Commitments shall automatically cease to apply.

SECTION D. REVIEW

4.1. The Commission may, where appropriate, in response to a request from the Combined Entity showing good cause waive, modify or substitute, in exceptional circumstances, one or more of the undertakings in these Commitments.
Duly authorised and acting for and on behalf of DENTSPY International Inc.

Duly authorised and acting for and on behalf of Sirona Dental Systems, Inc.

Brussels, 18 February 2016.
ANNEX I  COMMITMENT SAFEGUARDING THIRD PARTY ACCESS UNTIL 1 MARCH 2026
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