EUROPEAN COMMISSION
DG Competition

CASE AT.39639 Optical Disc Drives

(Only the English text is authentic)

CARTEL PROCEDURE

Council Regulation (EC) 1/2003

Article 7 Regulation (EC) 1/2003

Date: 21/10/2015

This is a provisional non-confidential version.

EUROPEAN
COMMISSION

Brussels, 21.10.2015
C(2015) 7135 final

COMMISSION DECISION

of 21.10.2015

relating to a proceeding under Article 101 of the Treaty on the Functioning of the European Union and Article 53 of the EEA Agreement

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THE EUROPEAN COMMISSION,

Having regard to the Treaty on the Functioning of the European Union[1],

Having regard to the Agreement on the European Economic Area,

Having regard to Council Regulation (EC) No 1/2003 of 16 December 2002 on the implementation of the rules on competition laid down in Articles 81 and 82 of the Treaty[2], and in particular Article 7 and Article 23(2) thereof,

Having regard to the Commission Decision of 18 July 2012 to initiate proceedings in this case,

Having given the undertakings concerned the opportunity to make known their views on the objections raised by the Commission pursuant to Article 27(1) of Regulation (EC) No 1/2003 and Article 12 of Commission Regulation (EC) No 773/2004 of 7 April 2004 relating to the conduct of proceedings by the Commission pursuant to Articles 81 and 82 of the Treaty[3],

After consulting the Advisory Committee on Restrictive Practices and Dominant Positions,

Having regard to the final report of the hearing officer in this case[4],

Whereas:

1. INTRODUCTION

(1) The addressees of this Decision were involved in a cartel concerning optical disk drives ("ODDs") that lasted from 23 June 2004 until 25 November 2008. They coordinated their behaviour in bidding events organized by two specific original equipment manufacturers ("OEMs"): Dell Inc. ("Dell") and Hewlett Packard ("HP").

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1 OJ, C 115, 9.5.2008, p.47.

2 OJ L 1, 4.1.2003, p.1.With effect from 1 December 2009, Articles 81 and 82 of the EC Treaty have become Articles 101 and 102, respectively, of the Treaty on the Functioning of the European Union ("TFEU"). The two sets of provisions are, in substance identical. For the purposes of this Decision, references to Articles 101 and 102 of the TFEU should be understood as references to Articles 81 and 82, respectively, of the EC Treaty when where appropriate. The TFEU also introduced certain changes in terminology, such as the replacement of "Community" by "Union" and "common market" by "internal market".

3 OJ L 123, 27.4.2004, p. 18.

4 Final report of the Hearing Officer of 19 October 2015.

(2) The Commission considers that the anti-competitive arrangements between these undertakings constituted a single, continuous and complex infringement of Article 101(1) of the Treaty on the Functioning of the European Union ("TFEU") and Article 53(1) of the Agreement on the European Economic Area (the "EEA Agreement").

2. THE INDUSTRY SUBJECT TO THE PROCEEDINGS

2.1. Market players subject to the present proceedings

(3) During the infringement period, the main players active on the worldwide market for ODDs included Philips, Lite-On, Philips-Lite-On, Hitachi-LG, […], Sony, Sony Optiarc and Quanta. These were identified as top ODD suppliers by customers such as Dell and HP.

2.1.1. Philips

(4) Koninklijke Philips N.V. together with its subsidiaries (together referred to as "Philips" throughout this Decision) produce video, audio products, healthcare and lighting products. Koninklijke Philips N.V. is a Dutch publicly listed company. Koninklijke Philips N.V. was directly active on the market for ODDs sales through its […][5] subsidiary Philips Electronics North America Corporation until 6 August 2006.[6]

(5) On 25 April 2003, Koninklijke Philips N.V. and BenQ Corporation created a joint venture called Philips BenQ Digital Storage in which Koninklijke Philips N.V. held 51% and BenQ 49% shareholding. As of 7 August 2006, the effective date of the amendment to the joint venture agreement of 25 April 2003, Philips' activities in the ODD business were transferred into Philips BenQ Digital Storage Corporation, which after corporate changes on 5 March 2007 became a joint venture with Lite-On named Philips & Lite-On Digital Solutions Corporation (see Section 2.1.3).

2.1.2. Lite-On

(6) Lite-On IT Corporation and its subsidiaries (together referred to as "Lite-On" throughout this Decision) have manufactured and sold consumer electronics, ODD products and other electronic components. Lite-On IT Corporation was a publicly listed company under the laws of Taiwan, R.O.C.[7] but was merged into Lite-On Technology Corporation on 30 June 2014. On that date, Lite-On IT Corporation ceased to exist as a separate legal entity[8]. Lite-On (USA) International Inc., Lite-On Americas, Inc. and Lite-On Sales & Distribution, Inc. were wholly owned subsidiaries of Lite-On IT Corporation active in the ODD business during the infringement period.

2.1.3. Philips-Lite-On (formerly Philips-BenQ)

(7) Philips BenQ Digital Storage Corporation ("PBDS") used to develop and sell ODDs for personal computers. It was a private limited company founded in 2003 as a joint

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5 Koninklijke Philips NV held […] of shares in Philips Holding USA, which in turn held […] of shares in Philips NA (ID […]).

6 ID […].

7 ID […].

8 ID […].

venture of Koninklijke Philips N.V. and BenQ Corporation under the laws of Taiwan, R.O.C.[9]

(8) On 5 March 2007, Lite-On IT Corporation took over the BenQ's holding in the joint venture through the purchase of BenQ's shares in PBDS. The joint venture's business continued in its entirety and the entity was renamed Philips & Lite-On Digital Solutions Corporation.[10]

(9) Philips & Lite-On Digital Solutions Corporation and its […] subsidiary Philips & Lite-On Digital Solutions USA, Inc. (together referred to as "PLDS" throughout this Decision) develop and sell ODDs for personal computer applications, game consoles and automotive infotainment products. Philips & Lite-On Digital Solutions Corporation is a corporation established under the laws of Taiwan and it also has offices in the Netherlands, Germany and the United States.[11]

(10) Koninklijke Philips N.V. holds a […] share in Philips & Lite-On Digital Solutions Corporation[12]. Lite-On IT Corporation holds a […] share in the PLDS joint venture. The ownership structure of Philips & Lite-On Digital Solutions Corporation has not changed since its creation on 5 March 2007.[13]

2.1.4. Hitachi-LG

(11) Hitachi-LG Data Storage, Inc. and its wholly owned subsidiary Hitachi-LG Data Storage Korea, Inc. (together referred to as "HLDS" throughout this Decision) designs, develops and sells ODDs and does not have manufacturing operations of its own. Hitachi-LG Data Storage, Inc. is a joint venture of Hitachi, Ltd. (Japan) and LG Electronics Inc. (Korea), who manufacture ODDs at their respective manufacturing facilities.[14] Hitachi-LG Data Storage, Inc. was established on 22 November 2000 and started operating as of 1 January 2001. It is a limited liability company under the Commercial Code of Japan. Hitachi-LG Data Storage Korea Inc. operates since 2001. HLDS also has branches in Taiwan, Singapore, China, Malaysia and the Netherlands.[15]

(12) Hitachi, Ltd. holds a 51% share and LG Electronics Inc. a 49% share of Hitachi-LG Data Storage, Inc.[16]

2.1.5. […]

(13) […]develops and sells ODDs. The relevant legal entities are the following:

– Toshiba Samsung Storage Technology Corporation ("TSST Japan") is a joint venture of Toshiba Corporation (Japan) and Samsung Electronics Co., LTD (Korea). It is a Japanese stock corporation. At present, it is a holding

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10 ID […].
11 ID […].
12 ID […]; ID […].
13 ID […]; ID […]; ID […].
14 ID […]; ID […].
15 ID […]; ID […]; ID […].
16 ID […].

company.[17] Toshiba Corporation holds a 51% share and Samsung Electronics Co., Ltd. holds a 49% share of TSST Japan ;[18]

– Toshiba Samsung Storage Technology Korea Corporation ("TSST KR") was a wholly owned subsidiary of TSST Japan during the infringement period. It is a Korean stock corporation.[19]

(14) TSST Japan and TSST KR (together referred to as "TSST" throughout this Decision) began operations on 1 April 2004 as two separate operating units. In December 2005, TSST Japan exited the market, remaining with reduced transitional sales activities until early 2008.[20] TSST KR gradually assumed the sales activities of TSST Japan and is directly engaged in the development, marketing, sales and after-sales services of ODDs.[21]

2.1.6. Sony

(15) Sony manufactures audio, video, communications and information technology products for the consumer and professional markets and is a provider of entertainment content, products and services.[22]

(16) The relevant legal entities are the following:

– Sony Corporation is the ultimate parent company. It is a stock corporation organized and existing under the laws of Japan;

– Sony Electronics Inc. is a wholly owned indirect subsidiary of Sony Corporation, located in the United States. It is a corporation organized and existing under the laws of Delaware, the United States. Its operations include research and development, design, engineering, sales, marketing, distribution, and customer service;[23]

(17) Sony Corporation and Sony Electronics Inc. are together referred to as "Sony" throughout this Decision.

(18) Sony Electronics Inc. was, along with Sony Corporation, the legal entity participating on behalf of Sony in the procurement events organized at least by Dell and continued to do so until 1 April 2007.[24]

2.1.7. Sony Optiarc (formerly Sony NEC Optiarc)

(19) Sony Optiarc Inc. (formerly Sony NEC Optiarc Inc.) is a stock corporation organized and existing under the laws of Japan. It was established on 3 April 2006 as a joint venture of Sony Corporation and NEC Corporation under the business name Sony NEC Optiarc Inc. Each parent contributed its respective ODD business to Sony NEC Optiarc. Sony Corporation acquired 55% of the voting shares of the joint venture and NEC Corporation the remaining 45%[25].

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24 ID […]; ID […]; ID […].
25 ID […].

(20) Between 3 April 2006 and 1 April 2007, ODDs manufactured by Sony NEC Optiarc Inc. were sold and distributed in the European Economic Area (EEA) by subsidiaries of Sony Corporation and NEC Corporation, respectively (see recital (18)).

(21) Since 2 April 2007, Sony NEC Optiarc Inc. together with its wholly owned subsidiary Sony NEC Optiarc America Inc. (together referred to as "Sony Optiarc" throughout this Decision; by contrast, "Sony/Optiarc" refers to both Sony and Sony Optiarc, which have jointly replied to the SO and Commission RFIs.) negotiated and obtained procurement contracts and took orders, at least from Dell, for ODDs.[26] After 1 September 2007 Sony NEC Optiarc Inc. continued acting as a counterpart in the procurement events organized by Dell.[27] […].[28]

(22) On 5 December 2008, Sony Corporation acquired sole control of Sony NEC Optiarc Inc., which was renamed Sony Optiarc Inc.[29] Sony Corporation holds 99% of the share capital of Sony Optiarc Inc directly and the remaining 1% via wholly owned subsidiaries.[30]

2.1.8. Quanta

(23) Quanta Storage Inc. ("Quanta") operates in the computer storage devices sector and is engaged in the research and development, design, manufacture and supply of ODDs. It was established in February 1999. It is a public company listed at the Taipei stock exchange in Taiwan, R.O.C.[31]

2.2. Contractual arrangements between the undertakings subject to the present proceedings

(24) During the infringement, ODD suppliers such as Lite-On, Sony, Sony Optiarc and Quanta entered into bilateral contractual relationships involving close cooperation on the production, development and sale of ODDs. Under the arrangements, the undertakings were also often jointly involved in preparing bidding events and shared the revenues generated by the sales to Dell and/or HP.

(25) The mere existence of the contractual arrangements during the infringement period however does not imply that proven cartel participation of one contractual partner is automatically imputed to the other party to the arrangement, unless the involvement of this other contractual party is also demonstrated to the requisite legal standard.

2.2.1. Cooperation between Sony and Lite-On

(26) Between May 2003 and March 2007, Lite-On designed and manufactured ODD products ultimately sold under the Sony brand on the basis of the revenue-sharing arrangements[32]. Under the arrangements, sales responsibility was in general conferred upon Sony, while Lite-On was responsible for quality and engineering issues[33].

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27 […].
28 ID […]; ID […]; ID […].
29 ID […]; ID […]; ID […].
30 ID […].
31 ID […], company webpage www.qsitw.com.
32 ID […][…].
33 ID […].

2.2.2. Cooperation between Sony Optiarc and Quanta

(27) The commercial relationship between Quanta and Sony Optiarc began on 1 November 2006 and […][34].

2.3. The product

(28) The infringement concerns ODDs used in Personal Computers ("PCs": desktops and notebooks) produced by Dell and HP. ODDs are also used in a wide range of other consumer appliances such as CD or DVD players, game consoles and other electronic hardware devices.

(29) ODDs used in PCs differ according to their size, loading mechanisms (slot or tray) and the types of discs that can read or write. ODDs can be split into two groups of so called half-height (HH) drives for desktops and slim drives for laptops. The slim drive sub-group includes drives that vary by size.[35] Both half-height and slim drives differ by type depending on their technical functionality (see Table 1).

Table 1: Different types of ODDs

CD-ROM, DVD-ROM	They read CD or DVD data.
CDRW, DVDRW	They read and write CD or DVD data.
Combo	They read and write CD data but only read (and not write) DVD data.
BD ROM	They read data on CD with blue ray disc technology.
BD Combo	They read and write data on DVDs, but only read data on CDs with blue ray disc technology.
ODDs with Light Scribe (LS) technology	LS is an extra feature allowing to create direct-to-disc labels (as opposed to stick-on labels).

2.4. Description of the market

(30) The supply-side of the market has seen numerous changes in the competitive structure. As described in Section 2.1, the ODD suppliers formed and operated joint ventures. In addition, some of them have also cooperated with one another on the production, development and sale of ODDs (see Section 2.2).

(31) The demand-side of the market counts a high number of players. Beside Dell and HP, customers include *inter alia* OEMs such as Acer, Asus, Lenovo (all computers), Microsoft (game consoles), as well as those which are vertically integrated with the addressees of this Decision such as Samsung, TSST or Sony.

(32) The evidence in the Commission file points to contacts between the parties regarding procurement procedures organized by Dell and HP. Dell and HP are the two most important OEM on the global market for PC. Dell and HP use standard procurement procedures carried out on a global basis which involve, amongst other things,

[34] ID […], ID […], ID […] […]

[35] Slim ODDs used in laptops measure 12.7 mm, 9.5 mm or 7 mm in height.

quarterly negotiations over a worldwide price and overall purchase volumes with a limited number of pre-qualified ODD suppliers. Generally, regional issues did not play any role in ODD procurement other than that related to forecasted demand from regions affecting overall purchase volumes.[36]

(33) The procurement procedures included requests for quotations ("RFQs") or electronic requests for quotations ("eRFQ"), internet negotiations ("INs"), e-auctions and bilateral (offline) negotiations. At the close of a procurement event, customers would allocate volumes to participating ODD suppliers (to all or at least most of them, unless there was an exclusion mechanism in place) depending on their quoted prices (for example, the winning bid would receive 35-45 % of the total market allocation ("TAM") for the relevant quarter, the second best 25–30%, the third 20 % and so on). These standardized procurement procedures were employed by customers' procurement teams with the purpose to achieve efficient procurement at competitive prices. To this end, they used all possible practices to stimulate the price competition between the ODD suppliers.

2.4.1. Procurement procedures specific to Dell account

(34) Since 1 January 2003, Dell has made substantial use of INs.[37] It has also used bilateral face-to-face negotiations and bilateral negotiations in order to enter so called Long Term Agreements ("LTAs"). Other procurement methods such as requests for quotations ("RFQs") served to qualify ODD suppliers for new product offerings.

(a) Dell's Internet Negotiations (INs)

(35) INs were generally held quarterly. Sometimes they covered the first two months of the upcoming quarter which started approximately two months from the date the IN was held. The third month of the quarter was often negotiated bilaterally rather than via IN. Other times a single IN was run for the entire quarter or separate INs were held for the first two months and then one for the third month.

(36) When the appointed time for the IN arrived, the participants logged into the IN program with a web interface and entered bids.[38] The IN were organised either as a "rank only" event where ODD suppliers could see in real time, via their access to the bidding screen, their relative rank against the other ODD suppliers or as a "blind" event where the "rank only" functionality was disabled and the ODD suppliers saw no information about their relative position.[39] The participants could never see the identity of other ODD suppliers participating to the IN, including their bids or rankings. Sometimes, ODD suppliers could be shown the existing lowest bid (without any identification of the bidder) or told their relative rank in the bidding (without any identification of the other bidders or even what the low bid was).[40]

(37) The IN could last for a specific period of time or end after a defined period, for example 10 minutes after the last bid, when no ODD supplier continued bidding. In some circumstances, IN could last hours if the bidding was more active or if the duration of the IN was extended in order to incentivize ODD suppliers to continue

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36 ID […]; ID […].
37 ID […].
38 ID […].
39 ID […].
40 ID […].

bidding.[41] On the contrary, even where the IN length was indefinite based on the final bid, Dell could announce at some point the closing of the IN. Dell could decide to change from "rank only" to "blind".[42] Dell could cancel the IN if the bidding or its result were found dissatisfactory and run a bilateral negotiation instead. The IN process was monitored by Dell's responsible Global Commodity Managers ("GCM").

(b) Dell's Requests for Quotations (RFQs)

(38) Generally, RFQs served to identify and evaluate ODD suppliers in advance either when an additional ODD supplier was needed for an existing product or when there was a new product offering. Standard refreshes of ODD products or small manufacturing changes did not normally require RFQs. RFQs were initiated by inviting the ODD supplier contacts to provide response, within a specific period of time, usually approximately two weeks, regarding a number of elements of the products under qualification covering five areas of so called Dell Quarterly Business Review criteria ("QBR"): quality, cost, continuity of supply, technology, service and support. Whereas RFQs were primarily focused on technical and quality data, information on the pricing was also required. The actual pricing for which the products would be finally purchased has been however negotiated by other methods, primarily INs.[43]

(c) Dell's bilateral negotiations

(39) Bilateral negotiations have been used less frequently than INs and often in complement to them. By way of example, Dell conducted an IN in May 2008 for the supply period from August to September and consequently October price would be negotiated bilaterally. In terms of content, GCM negotiated directly with ODD suppliers the same terms as in the IN. Generally, the GCM provided a target price to the ODD supplier and the ODD supplier and GCM then negotiated off of that price. Bilateral negotiations were conducted through either e-mail, face-to-face meetings or via phone calls.

(d) Dell's Long Term Agreements (LTA)

(40) Dell also engaged in bilateral negotiations with some of its ODD suppliers to enter LTA. The LTA provided, generally for the next year, a certain TAM award to the ODD supplier on the condition that it undertook best efforts to provide a certain price position to Dell. These agreements, sometimes referred to as strategic agreements were often expressed in Memorandums of Understanding (MOU) between the ODD suppliers and Dell. During the LTA negotiation process, Dell would often negotiate for specific rebate amounts to be paid to Dell if Dell meets certain volume thresholds for ODD purposes from the ODD supplier during defined time periods.

2.4.2. Procurement procedures specific to HP account

(41) Since January 2003 the main procurement methods of HP were RFQs and e-auctions introduced in September 2005.[44] Both of them were carried out online using the same platform. Besides these two procurement methods, bilateral offline negotiations were also used. RFQs and e-auctions have been the preferred method at HP for the

41 ID […]; ID […].
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43 ID […].
44 ID […]; ID […].

procurement of high-volume ODDs, in particular DVDRW and DVD-ROM whereas bilateral negotiations are typically used for low-value ODDs such as COMBO drives and CD-ROM, low-volume procurement or in need for unexpected additional supply.[45] Bilateral negotiations were also more frequent in the procurement for notebooks than in that for desktop PC.

(a) HP's Requests for Quotation (RFQs)

(42) RFQs were held quarterly. They combined online and face-to-face negotiations and spread over a period of time, usually two weeks. ODD suppliers were invited to a round of open bidding for a specified period of time to submit their quote to the online platform or by e-mail. Once the first round of bidding elapsed, HP would meet with each participant and start negotiations based on the ODD supplier's bid. In the context of these negotiations HP attempted to obtain a better bid from each ODD supplier without disclosing to any given ODD supplier the identity or the bid submitted by any other ODD supplier.

(b) HP's e-auctions

(43) E-auctions were normally run in the format of a reverse auction. In that format, bidders log into the online platform at the specified time. The auction would start at a price set by HP and bidders entering progressively lower bids would be informed of their own rank (but not of the exact bids or rank of any other ODD suppliers) every time a new bid was submitted. At the end of the allotted time (that can be extended by a few minutes during the auction) the ODD supplier having entered the lowest bid would win the auction and other ODD suppliers would be also ranked second and third according to their bids.

(44) Sometimes e-auctions would take form of so-called "Dutch auctions". HP would start an auction at a given price and would raise its offer at fixed intervals until an ODD supplier accepted the offer by HP. The first ODD supplier to accept the offered price would be awarded 100 % of the award. For security of supply and quality reasons, these auctions were rarely used.

(c) HP's bilateral negotiations

(45) Bilateral negotiations involved more than one ODD supplier and were carried out offline or in face-to-face meetings. In practice, HP would contact the qualified ODD suppliers providing them with an estimation of the overall volume needed and asking them for their price. A traditional one-to-one negotiation would then start on the quoted price in exchange for share of supply.

2.4.3. Features of procurement procedures that Dell and HP had in common

(46) Procurement methods used by Dell and HP shared a relatively high number of features. This was true both in terms of internal management of these procurement methods, including how procurement teams proceeded in order to select a particular method, and in terms of their practical handling.

(47) First, the selection of a concrete procurement method was decided by the respective procurement teams under supervision of commodity managers, depending on their individual circumstances or experience with the ODD suppliers, market conditions or

[45] ID […].

a number of ODD suppliers participating in the event.[46] Each procurement team was led by a commodity manager who reported to a director or manager overseeing the procurement for components, including ODDs. Commodity managers were responsible for daily procurement activity including communications with ODD suppliers and conducting price negotiations. Engineers who were responsible for technical aspects of the procurement, particularly for the process of qualification of drives, played an important role in the procurement team.[47]

(48) Second, commodity managers typically started the procurement events by sending an invitation to their ODD supplier contacts. The procurement event was normally held within a few days or weeks of the invitation. Invitations are only sent to pre-qualified ODD suppliers. An ODD supplier must go through the entire qualification process every time it develops or releases a new type of ODDs or a new model of an existing ODDs.[48]

(49) Invitation letters typically included the following information: the type of event (IN, RFQ, e-auction) and the date and time when it would be held, the product that is subject of negotiation, the quarter for which the volumes would have to be delivered and for which the pricing negotiated in the event will be effective, estimation of forecasted volumes to be awarded and sometimes also a number of participants without disclosing their identity. They also explained the different modalities and rules of the event, such as the length of time or deadline within which the bids will be accepted, possibility of extension of time or deadlines, visibility that will be provided to the ODD suppliers.

(50) Invitations further contained what percentage of available ODD purchases would be awarded to each bidder according to its rank in the bidding, so called TAM shares[49]. For reasons of security of supply, the procurement was rarely awarded to one ODD supplier. The award scenarios slightly differed for each customer. For illustration, Dell could award 50 % to the 1st ranking bidder, 25 % to 2nd ranking bidder and 15 % to 3rd ranking bidder and 10 % for open allocation in the scenario of three participants; where, for example, four bidders participated Dell would decrease the 1st bidder award from 50 % to 40 % in order to have this 10 % for the 4th bidder.[50] HP also set in advance the final share of supply to be awarded to each ODD supplier and preferred to do so in a percentage range. Thus, HP could award 35-45 % to a winning bidder, 25-35 % to 2nd bidder and 20-30% to 3rd one. Customers might also take measures with the view to stimulate competition. HP would sometimes award a guaranteed fixed volume to the winning bidder which meant that the shares of other bidders would be appropriately decreased.

(51) Invitations also included details on the pricing. For example, the customers would require the ODD supplier to start the bidding with a specified opening bid or initial price, which was, according to Dell, almost always the lowest price bid of each individual ODD supplier from the previous negotiation, but sometimes also the price determined by the customer. For the purposes of online bidding, the customer would

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46 ID […]; ID […].

47 Official title used in Dell was Global Commodity Managers (ID […]). Official title used in HP was Procurement Commodity Managers (ID […]).

48 ID […]; ID […].

49 ID […]; ID […]; ID […].

50 ID […].

also specify the minimum bid decrement or how ties in low bids would be dealt with, often by declaring the first bidder at that amount the winner.[51] When inviting to events, the customer would sometimes warn ODD suppliers that they are required to submit aggressive price proposals.[52]

(52) Third, when the procurement events were over, customers sent a notification to each ODD supplier about its own award pursuant to its participation. Such notification did not contain the awards and prices of competing ODD suppliers of the same closed event.[53]

2.5. Trade flows of ODDs

(53) ODDs are supplied globally, including in the EEA, and it is apparent that the ODD suppliers that are addressees of this Decision were active in supplying ODDs to numerous EEA Member States, including Ireland, Poland and other locations in the EEA.[54] In addition, customers of the ODD suppliers concerned by this Decision- Dell and HP -were also established in the EEA. Therefore, during the infringement period set out in this Decision, there were substantial trade flows of ODDs between the Member States of the EEA.

3. PROCEDURE

3.1. The Commission's investigation and proceedings

(54) The investigation started as a result of a marker application that Philips filed on 14 January 2009 under point 14 of the Commission Notice on Immunity from fines and reduction of fines in cartel cases ("the Leniency Notice")[55]. On 29 January 2009 and on 2 March 2009 Philips, Lite-On and PLDS submitted an immunity application aiming at perfecting the marker application.

(55) No inspections were carried out, but on 29 June 2009, the Commission addressed targeted requests for information to the undertakings active in the industry.

(56) On 30 June 2009, the Commission granted conditional immunity from fines to Philips, Lite-On and PLDS.

(57) On 4 and 6 August 2009, the Commission received an application for a reduction of fines under the Leniency Notice on behalf of HLDS.

(58) The Commission has addressed several other requests for information to the addressees of this Decision and to third parties, including the customers Dell and HP.

(59) On 18 July 2012, the Commission initiated proceeding in this case and adopted a Statement of Objections ("SO"). The addressees had access to the Commission's investigation file in the form of a DVD and made use of their right to access the parts of the Commission file that were only available at the Commission's premises.

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51 ID […]; ID […].
52 ID […].
53 ID […].
54 ID […]; ID […] and ID […].
55 OJ C 298 of 8.12.2006, p. 17.

(60) All addressees of the SO made their views on the objections known to the Commission in writing. All addressees of the Decision participated in an oral hearing which took place on 29 and 30 November 2012.

(61) Following the request of Dell dated 31 October 2012, the Hearing Officer allowed Dell to be heard as an interested third person with regard to the proceedings in this case. Consequently, on 6 November 2012, pursuant to Article 13(1) of Regulation (EC) No 773/2004, the Commission informed Dell in writing about the nature and subject matter of the procedure.[56] On 23 November 2012, Dell provided written comments[57] and all addressees of the SO were given access to those comments.[58] On 26 November 2012, the Hearing Officer rejected Dell's request to attend the oral hearing.[59]

(62) On 14 December 2012, following statements made by the parties during the oral hearing suggesting that customers would have systematically shared information about bidding of other ODD suppliers, the Commission sent requests for information to the parties to provide all documents (the origin and date of which was clearly shown in the documents themselves) received from HP and Dell during the infringement period provided that they contained information on prices, rankings, volumes and other sensitive commercial information on ODD suppliers.[60] All parties replied to the request for information and access to the replies was provided to all of them.

(63) On 18 February 2014, the Commission adopted two Supplementary Statements of Objections ("SSOs of 18 February 2014") to supplement, amend and/or clarify the objections addressed to certain addressees of the SO as regards their liability for the alleged infringement. The addressees of the SSOs of 18 February 2014 made known their views to the Commission in writing, but did not request an oral hearing.

(64) On 1 June 2015, the Commission adopted another Supplementary Statement of Objections ("SSO of 1 June 2015"). The sole purpose of the SSO of 1 June 2015 was to supplement the SO and the SSOs of 18 February 2014 by addressing the same objections to additional legal entities whose parent companies (or their predecessors) were already addressees of the SO. The addressees of the SSO of 1 June 2015 made known their views to the Commission in writing, but did not request any oral hearing.

(65) On 3 June 2015, the Commission issued a Letter of Facts to all parties. The addressees of the Letter of Facts made known their views to the Commission in writing.

3.2. The main evidence

(66) The principal documentary evidence relied upon consists of the documents submitted by Philips, Lite-On and PLDS (the immunity applicant) and HLDS (the reduction of fines applicant), their corporate statements, and the replies to the Commission's requests for information by all the parties concerned and by the customers. The

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57 ID […].
58 ID […].
59 ID […].
60 ID […][…].

documentary evidence, contemporaneous to the infringement and provided by the leniency applicants, includes internal reporting from account managers, instructions from management and the telephone invoices or detailed call statements showing the list of outgoing and incoming calls of the account managers involved in the anti-competitive arrangements.

4. DESCRIPTION OF THE CARTEL

4.1. Overview

(67) The cartel participants coordinated their competitive behaviour, between at least 23 June 2004 and 25 November 2008. The coordination took place through a network of parallel bilateral contacts. The cartel participants aimed at accommodating their volumes on the market and ensuring that the prices remained at levels higher than they would have been in the absence of the bilateral contacts.

(68) The coordination between the cartel participants concerned the customer accounts of Dell and HP, the two most important OEMs on the global market for PCs. In addition to having bilateral negotiations with their ODD suppliers, Dell and HP applied standardized procurement procedures, which took place at least on a quarterly basis. The cartelists used their network of bilateral contacts to manipulate these procurement procedures, thus thwarting their customers' attempts to stimulate price competition.

(69) Consistent exchange of information in particular enabled them to possess a very complex knowledge about their competitors' intentions already at the moment of entering the procurement event and therefore to foresee their competitive strategy.

(70) On a regular basis, they exchanged pricing information regarding specific customer accounts as well as price unrelated information, such as existing production and supply capacity, inventory status, the qualification status, timing of the introduction of new products or upgrades. In addition, the ODD suppliers monitored the final results of closed procurement events, that is the rank, the price and the volume obtained.

(71) Whilst taking into account that they must keep their contacts secret from customers, to contact each other ODD suppliers used the means they deemed sufficiently appropriate to achieve the desired result. […]. Instead, the contacts took place bilaterally, mostly via phone calls and from time to time also via emails, including private hotmail addresses and instant messaging, or meetings, mostly at the level of global account managers.

(72) The cartel participants contacted each other regularly. The contacts, mainly by phone, became more frequent around the procurement events amounting to several calls per day between some pairs of cartel participants. Generally, contacts between some pairs of cartel participants were significantly higher than between other pairs.[61]

4.2. Origins of the cartel

(73) […].[62]

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61 […].

62 ID […]; ID […]; ID […].

(74) In February 2003, Dell introduced internet negotiations (INs) as its primary procurement model in order to make the ODD suppliers' pricing strategies less predictable and to drive down the prices for procured products. Similar format of a procurement model was introduced by HP in September 2005 under the name "e-auction".[63] In response to Dell's and HP's attempts to stimulate price competitions by changing the bidding mechanism, the ODD suppliers increased their contacts and rigged the auctions.[64]

(75) […].[65][…][66] […][…][67] The cartel participants never resorted to a multilateral meeting afterwards, but instead developed a web of bilateral contacts which is described in this Decision.[68]

4.3. Individuals involved in the cartel

(76) Bilateral contacts took place primarily at the level of account managers and to some extent also at the senior manager level.[69]

(77) Account managers (called Product Manager, Global Account Manager or Senior Manager) were the principal ODD suppliers' contact points for customers' commodity managers in charge of procurement of ODDs. They were responsible for the day-to-day operation of customer accounts and for facilitating the business relationship with customers.[70]

(78) Account managers reported to the line managers (called […],[71] Senior or Assistant Managers,[72] Senior Managers at HQ[73]), who had overall responsibility for one or more customer accounts. Generally, these line managers reported further to a manager (called […],[74] General Manager[75] or Vice President & Sales and Marketing Team Leader[76]) supervising the business relationship with all the customers, including overall authority over pricing and strategy issues.[77]

(79) Being the principal contact points in the network, account managers considered that collecting information from competitors was part of their job[..].[78] Account managers were instructed and expected to collect information from competitors and they did so on a continuous basis[…].[79] Overseeing management was regularly copied onto the e-mails enclosing the internal reports of account managers containing information on competitors. From time to time, account managers received a specific request from the management or from its team who was preparing the product costing, to contact

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63 ID […].
64 ID […].
65 ID […].
66 ID […]; ID […].
67 ID […]; ID […].
68 ID […].
69 […].
70 ID […].
71 […] (ID […]). […].
72 […] (ID […]).
73 […] (ID […]).
74 […] (ID […]).
75 […] (ID […]).
76 […] (ID […]).
77 ID […].
78 ID […]; ID […]; ID […].
79 ID […]; ID […]; ID […].

competitors and, for example, to find out their prices.[…][80] Further, it was standard practice that account managers would report to their line management face-to-face or via conference call on what they had been able to find out from competitors or from other sources{…].[81] […].[82]

(80) When account managers collected information from competitors, they also shared their own intentions […].[83] Moreover, they did so with the expectation that their counterparts would pass on the information to their management having final pricing authority, exactly as they did with their own management[…].[84] In some instances, it was a back and forth process, since the management would have the account manager go back to competitors again.[…] [85] This included, in some instances, coming to an understanding with competitors regarding aggressiveness, price or ranking.[…] [86]

(81) When taking up their functions, the new account managers were typically briefed by their predecessors about their counterparts at ODD suppliers, including their trustworthiness. A leaving account manager would typically hand over to his successor the contact details of his contacts at other ODD suppliers[…] [87], would properly advise on the information which was usually exchanged with each and every competitor and eventually point out the exceptions to the rule, if any[88]. Moreover, there was a general trend that an account manager new to the network would be introduced by his predecessor to his contacts at competitors.[…] [89]

(82) All these measures ensured that the relationships continued uninterrupted not only when the […] that used to be directly involved in anti-competitive contacts was replaced, but also when the […] changed their location. […].[90]By way of another example, the relations between […] at cartel participants responsible for Dell were originally developed in Austin, United States, and continued in Singapore, yet between different persons, after the relocation of the competent […] there (se e recital (211)).[91]

(83) In case of Dell, the majority of the account managers personally involved in the anti-competitive contacts were based in Austin, United States, where Dell had its offices until October 2007. Following Dell's decision to relocate its procurement team to Singapore, the majority of the ODD suppliers moved their account managers to Singapore.

(84) As for HP, the company had three divisions, Business PC unit ("HP bPC") and Consumer PC unit ("HP cPC") for desktops and Mobile PC unit ("HP mPC") for laptops.[92] HP cPC unit was based in San José, United States, and HP bPC and mPC

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80 ID […]; ID […]; ID […]; ID […]; ID […].
81 ID […]; ID […].
82 ID […].
83 ID […]; ID […].
84 ID[…]; ID […]; ID […].
85 ID […].
86 ID […].
87 ID […]; ID […]; ID […]; ID […].
88 ID […].
89 See for example ID […]; ID […]; ID […]; ID […]; ID […].
90 ID […]; ID […].
91 ID […].
92 ID […].

were based in Houston, United States.[93] Whereas HLDS and TSST had account managers based both in San Jose and Houston, the account managers of the other parties were based in Houston and appeared to have had responsibility for the HP account as a whole.[94]

(85) Higher and top management of the cartel participants was generally based in the headquarters. They were located for HLDS and TSST in Korea, for PLDS and Quanta in Taiwan and for Sony and Sony Optiarc in Japan.

4.4. Means used to establish contact and ensure the communication flow

(86) The cartel arrangements were implemented mainly by phone calls and periodical bilateral meetings and to some extent also through emails or via instant messaging.[95] Generally, the relationships between different pairs of ODD suppliers appear to have varied over time, in terms of closeness and intensity.[…] [96] Indeed, the frequency of the contacts increased as the account managers got to know each other better […].[97] It follows from the file that account managers at different ODD suppliers worked hard to maintain and deepen their relationships to facilitate information exchange.[98]

(87) Bilateral face-to-face meetings were particularly helpful at the start of the relationships, especially when new account managers took over the function and did not know each other yet.[99] Account managers, however, continued meeting even after getting to know each other.[100] Where possible, meetings were considered more effective than phone calls, in that they helped to build a stronger relationship and also made easier for its participants to assess if the information obtained was accurate.[101]

(88) Further, account managers would mostly contact each other by phone with the purpose to collect information.[102] These bilateral contacts normally took place up to once a week. When, however, there was a procurement event coming up, they could have hold calls several times a day.[103]

(89) As mentioned in recitals (72), the file includes telephone invoices of several account managers for Dell and HP […]. […].[104]

(90) On the basis of this evidence, in relation to INs and e-auctions organized by Dell and HP, account managers at […] placed calls to or received them from their counterparts at other cartel participants […]. Further, in relation to RFQs organized by HP, account managers at […] placed or received calls to/from the cartel

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93 ID […].
94 ID […].
95 ID […].
96 ID […]; ID […].
97 ID […].
98 ID […]; ID […]. The efforts devoted to this were reflected in the contemporaneous evidence […] (ID […]).
99 ID […]; ID […]; ID […]; ID […]; ID […]; ID […].
100 ID […]; ID […].
101 ID […]; ID […].
102 ID […].
103 ID […]; ID […].
104 It has to be noted that the available phone records provide only an incomplete picture of the density of the phone contacts, as they cover only a limited number of account managers involved in the contacts and for many of them, they do not cover the entire period of their involvement.

participants[…]. Similarly, in connection with the offline negotiations, calls were made[…].[105]

(91) Sony/Optiarc[106] and TSST argue in relation to specific contemporaneous pieces of evidence expressly disclosing contacts among cartel participants that the phone records, even when showing contacts around the time of such contacts, do not show that actual communication would have taken place.[107]

(92) To the extent that the telephone invoices or call statements showed incoming and outgoing telephone calls, including dialled phone numbers, this evidence alone enables to establish that the cartel participants took the initiative for the contacts.[108] The content of the telephone conversations can however be reconstructed in view of the entire body of evidence, particularly the contemporaneous internal reporting by e-mail which contained information on cartel participants along with the telephone invoices.[109] In this regard, it is evident that the conversations with competitors usually preceded the date of sending the internal reports by several days since the account managers reported to the management as soon as they gathered information from all competitors.[110] In addition, as a phone call of one-minute duration or less indicated in the invoice could mean that either the phone call took place and was short, or that the intended recipient of the call did not respond[111], the Commission disregarded these short contacts. Nevertheless, even these short calls (or calls that potentially did not take place) yet again demonstrate the general pattern of the cartel participants to contact each other on a regular basis. Overall, the phone records corroborate the existence of anticompetitive contacts identified in oral statements or contemporaneous emails and minutes submitted by the parties.

(93) Moreover, […] […]does not provide a complete picture of the contacts that took place during the relevant period. While the file only contains the invoice or call statements of mobile phones of certain individuals (for example [...] and […] or[…]. The phone records for the fixed line are however not available. They also obtained further information through other means such as during face-to-face meetings with competitors.[112] Based on the foregoing, the real number of the bilateral contacts exceeds the phone calls […].

4.5. Evidence that the parties undertook efforts to conceal the contacts

(94) It can be established based on the evidence in the file that the cartel participants contacted each other in the awareness that such contacts were illegal and took measures to avoid or limit the risks of being detected. There is evidence that they took care to meet in places where they could not be spotted by customers, including in parking lots or movie theatres.[113] They preferred face-to-face meetings as a way to avoid leaving any traces of communication or being overheard.[114]

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105 ID […].
106 "Sony/Optiarc" refers to both Sony and Sony Optiarc, […].
107 ID […][…]; ID […][…].
108 ID […]; ID […].
109 ID […].
110 ID […]. see also ID […] and ID […].
111 ID […].
112 ID[…]; ID […].
113 ID […]; ID […]; ID […]; ID […].
114 ID […].

(95) Further, it stems from the contemporaneous evidence that ODD suppliers took care not to communicate the increase of cost or price to a customer at the same time as other ODD suppliers in order not to raise customers' suspicion that ODD suppliers communicated behind their back.[115] Moreover, some incidents appear to have taken place in the past: leaks to customers about anti-competitive exchanges between ODD suppliers resulted in the fact that the responsible account managers had to leave their jobs or positions in the company[116] and the account managers seem to have been aware of this risk.[117] The account managers in […] for example received instructions from the management such as *[...]* to competitors and that *[...]* or that information is*[...]*.[118]

(96) ODD suppliers were also prudent when drafting their internal reports.[119] They sometimes explicitly emphasized that information is *[...]* and cannot be divulged to customers.[120] Generally, they avoided using names of other competitors, particularly those of their account managers with whom they were in direct contact. [121] Instead, they used abbreviations or generic names such as *"PM of T"*, *"T"* or just *"Korean competitor"* for TSST, *"H"* for HLDS, *"P"* or *"Taiwanese competitor"* for PLDS, *"LO"* for Lite-On or the first letter of the names with asterisk(s) such as *"S*"* for Sony and Sony Optiarc.[122]

(97) In addition, account managers of […] avoided mentioning in writing that certain information was obtained directly from competitors. Instead, they would say*[...]*; further, if the internal report of […] contained for example *[...]*this meant that[…].[123]

4.6. Dynamics and functioning of the cartel

(98) The evidence in the file demonstrates that contacts followed a regular and clearly distinguishable pattern in terms of both their timing and type of exchanged information […]. The timing of contacts clearly coincided with the business cycle of negotiations organized by customers for various types of ODDs, at least on a quarterly basis. This flow of information was shared to ensure that it could be used at both ends to make commercial decisions in the relevant period. Often, the reciprocal exchanges were directly linked to concrete bidding events.[124] The file indicates that from time to time the cartel participants cheated on each other[125] or provided approximate[126] information. However, it was explained that even then, the cartel participants […].[127]

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115 ID […]; ID […]; ID […]; ID […].
116 ID […]; ID […].
117 ID […].
118 ID […]; ID […]; ID […].
119 […] (ID […]). reads: *"...how to possible handle next combo IN : I prefer not to put this in email, call me through skype phone for this.*" […] (ID […]) […], reads: "*I changed e-mail title.(I don't want to put competitor's name on e-mail title)...*". Other instances are documented in ID […].
120 ID […]; ID […]; ID […].
121 ID […].
122 ID […]; ID […].
123 ID […]; ID […]; ID […].
124 ID […]; ID […].
125 ID […].
126 ID […]; ID […].
127 ID […]; ID […].

(99) The anticompetitive contacts can be divided into three main periods: (i) contact prior to the bidding, (ii) contacts during the bidding and (iii) the post-bidding contacts.

(100) As part of the preparations for the upcoming bidding event, at least once a month, the cartel participants would exchange commercially sensitive information, such as production capacity, supply volumes and other information. The objective of these exchanges was to gain sufficient background information from which it was possible to predict competitors' strategies in upcoming bidding events (see Section 4.6.2). Further contacts took place after ODD suppliers received from their customers invitations to participate in the bids. The purpose of these contacts was to find out who was invited, who would participate and what would be the intended ranking and pricing.

(101) The contacts during the bidding events concentrated in particular on each other's ranking at a given point in the bidding and the prices quoted by the competitors.[128] They took place during the bidding events, irrespective of whether these bidding events were one-off (such as INs or e-auctions) or multiple round events.

(102) Finally, after bidding events took place, the cartel participants monitored their results, such as final prices and awarded volumes. Despite the fact that a procurement event was closed, this information was still of relevance for subsequent procurement events. This was because, in most cases, the price of each ODD supplier from the previous month (that is from the preceding closed event) was obligatory entered by the ODD supplier as its first bid.[129] Given its impact on subsequent procurement events, this information was generally not public and customers took measures to keep this information secret from the ODD suppliers (see recital (313)).

4.6.1. Contacts and information updates between cartel participants directly related to procurement events

4.6.1.1. Contacts and information updates prior to the relevant procurement events

(103) Invitations to participants in procurements events triggered the first wave of contacts between the cartel participants. They would contact each other to find out who had been invited to participate, to double check information received from customers and to verify or update information gathered previously, as explained in Section 4.6.2, particularly about each other's available volumes based on production capacity and inventory. Most importantly, they would inquire about each other's ranking ambitions and pricing intentions.[130]

(104) Generally, customers would not disclose identity of invited ODD suppliers. Invitations to bidding events specified only their number (see recital (49)). It was generally known who was qualified for a given product, particularly thanks to the constant information exchange. It could also be that new ODD suppliers were invited despite the fact that they had not passed through qualification, or that invited ODD suppliers would not participate, for example, due to insufficient capacity to support the tendered volumes. Therefore, the cartel participants wanted to double check, in particular when the number of invitees suggested that an additional ODD supplier

128 ID […].
129 ID […].
130 ID […].

had been invited or regarding whether there were potential qualification or quality issues, and so on.[131]

(105) Further, the cartel participants would double check other issues relevant for the upcoming event, such as initial or target prices. Initial prices for events were almost always set at the level of the prices of the participants in the past events (see recitals (51) and (137)). Thus, each ODD supplier had a different price. Sometimes, however, HP in particular set the initial price for all participants at the level of the final price of the highest ranked ODD supplier in the previous bidding event. The knowledge about the initial prices, which was, on the one hand, based on previous exchanges of information, and, on the other hand, verified through contacts prior to the procurement events, was useful in predicting to what extent the participants would have to lower their price to achieve the desired volumes.

(106) Their mutual conversations were useful for the cartel participants to counter different strategies employed by the customers. If the customer claimed that[…], the cartel participants would double check among each other.[132] Thus, they could better resist or even coordinate their approach to face the pressure exerted by the customer in order to achieve further price decreases.[133] Also, the […] at ODD suppliers would inform each other about how they reacted to requests by customers.[134]

(107) Moreover, the cartel participants would further update their information about available supply volumes in order to obtain indications about targeted ranking and planned aggressiveness. As explained in Section 4.6.2.2, ODD suppliers were already able to develop a sufficient knowledge about supply volumes through previous exchanges. Thus, their conversations prior to bidding events were generally confined merely to the following: "[…].[135]

(108) Most importantly, the cartel participants would exchange information on their intentions with regard to desired ranking, intended aggressiveness and pricing.[136] This information complemented the wealth of other information collected prior to bidding events, including that described in recitals (104) to (107) and appeared to have been systematic. Thus, ahead of the bidding events, the cartel participants could make their planned bidding strategies known to each other.

(109) Sharing information regarding planned aggressiveness has been systematic and took place in nearly every auction. It was particularly important in relation to INs and e-auctions since it helped to predict the outcome. In such circumstances, price was not as important because it could be tested in the system (see also recital (119)).[137] The purpose of messages about their planned aggressiveness (such as*[…]*) was twofold: the ODD suppliers warned their interlocutors not to even try to beat their offer and at the same time "tested" their reaction indicating to what extent they are likely to bid aggressively.[138] On the other hand, received signals about not being aggressive clearly impacted their bidding strategies since they could relax about the competition

131 ID […].
132 ID […]; ID […].
133 See for example ID […]; ID […]; ID […]; ID […]; ID […].
134 ID […]; ID […]; ID […].
135 ID […], ID […].
136 ID […]; ID[…]; ID […].
137 ID […].
138 ID […].

(see also recital (156)).[139] Neither of them would have to bid aggressively to gain the desired volume, even if no other understanding on price was reached.[140]

(110) Communications about pricing intentions involved questions such as "*[...]*" or "*[...]*".[141] Moreover, communications generally included the following messages: (1) the cartel participant(s) would not further decrease a price; (2) cartel participant(s) would not go below a certain price; (3) cartel participant(s) would go below a certain price if it were necessary for it (them) to obtain the desired ranking and corresponding volume (see also recitals (165), (198), (213) and (223)).[142]

(111) Whereas messages described in recital (110) would generally come from the cartel participants other than TSST, the one described in recital (109) can generally be linked to TSST. This can be explained by the fact that TSST was generally known as the price leader, generally interested in ranking first to secure the biggest volume, save for exceptional cases. On the other hand, depending on their capacity, HLDS and PLDS would generally reach second and/or third ranking and Sony and Quanta would usually finish fourth. Accordingly, messages coming from TSST towards the other cartel participants about its readiness to break a certain price level, if necessary, to secure the desired volume, were clearly supposed to warn the others not to go under this level.[143]

4.6.1.2. Contacts and information updates during procurement events

(112) Cartel participants continued their contacts during bidding events. Through these exchanges, ODD suppliers would complement their knowledge acquired previously regarding targeted rankings and planned aggressiveness by finding out each other's ranking at any given point in the bidding, especially when their own provisional ranking would not meet their expectations.[144]

(a) Contacts and updates during INs and e-auctions

(113) Contacts during INs or e-auctions tended to focus on rankings rather than on prices. Generally, exchanges on prices quoted during the bidding event were less frequent. The reasons were the following: First, as described in recital (36), the ODD suppliers had instant access to information regarding what their own provisional ranking was following their last entered bid. That said, gathering information about the competitors' ranking, taken together with information about its respective targeted ranking, was sufficient to determine how aggressive they needed to be to achieve the desired final ranking.[145] Secondly, as explained in recital (37), due to the time constraint, it would have been difficult for the ODD suppliers to agree on the next bidding price, particularly, where there were more than three participants or where the customers exerted pressure on the price.[146]

(114) Information on prices was also exchanged between the cartel participants in the framework of bilateral negotiations with Dell within the so-called "Reserve Quantity

139 ID […].
140 ID […]; ID […]; ID […].
141 ID […].
142 ID […].
143 ID […].
144 ID […].
145 ID […]; ID […].
146 ID […].

System". Since 2004 Dell held back a 15 % share as a reserve quantity and allocated it as reward to (typically) two ODD suppliers who lowered their price in subsequent negotiations below the winning IN bid price.[147]

(115) Bidding during online events took place within a limited time span. The course of event was followed not only by account managers, but also by other levels of management in the headquarters. The actual task to input the price into the system was conferred either on the headquarters or on the account managers. In any case, if headquarters input the price, the account managers watched the course of the event on the screen and vice versa.[148] As more people could log in the system, one could make the actual quotes and someone else could check the system to determine the quotes of competitors.[149]

(116) By contrast to exchanges prior to bidding events, the exchanges during the bidding were not systematic. Given the knowledge they were able to acquire prior to a bidding event, when everything went according to plan, there was no need for the cartel participants to contact each other again. Thus, the items that the account managers would double check among each other during the bidding were mostly the following: their provisional rankings when they would not correspond to their expectations based on the information gathered prior to the bidding event; each other's bidding prices or even agreement on such prices, only when it was necessary, such as when the customer exerted pressure on prices; and other information provided by the customer, such as information on available capacity to supply the volume corresponding to the provisional ranking.[150]

(117) In order to obtain certain information during the bidding (for example on provisional rankings of other ODD suppliers), they did not need to contact all of them. Regardless of the number of participants, it sufficed to contact one or two to obtain a clearer picture to determine his relevant competitor for the particular auction, based also on the information gathering prior to the bidding event.[151]

(118) As explained in recitals (108) and (109), during the information gathering prior to events the cartel participants managed to acquire a substantial knowledge that included their competitors' intentions with regard to targeted ranking and planned aggressiveness. Such information was combined with previously gathered information, in particular about their capacity to supply the volumes corresponding to a given rank and on the level at which the bidding would start (see recitals (105) and (137)). Consequently, the information exchanged enabled the cartel participants to estimate the provisional rankings of their competitors, the price gap between their price and that of their competitors and how they should bid to secure a targeted rank.[152]

(119) Normally, the cartel participants would not need to exchange information on prices during the bidding (see also recital (109)). This was because price was less important than rankings in INs and e-auctions. Moreover, at least with regard to INs, price

147 ID […].
148 ID […]; ID […]; ID […]; ID […]
149 ID […].
150 ID […].
151 ID […].
152 ID […]; ID […].

could be tested in the system. It did not allow ties, which meant that one could not enter a price already entered by a competitor.[153] Based on gathered wealth of information ODD suppliers generally could identify who this competitor was.

(120) However, where the customers put pressure on the ODD suppliers to have them lower their prices by referring to lower prices of their competitors, the cartel participants would contact each other to double check the accuracy of such information. Eventually, they would also inquire about their intentions by asking questions such as *"[...]?"*.[154] Further, even if there was an understanding on the positioning in a given the event, the cartel participants would exchange information about their price gaps. Too big a price gap would expose them to the risk that the customer, particularly Dell, would later refuse to pull the awarded TAM or would award them a zero TAM.[155] Sometimes, the cartel participants would ask each other not to lower their price any further during the event.[156] Their mutual contacts would thus lead to more or less maintenance of prices at existing levels enabling the cartel participants to secure the volume.[157]

(121) The cartel participants would also double check with each other any information that the customer concerned would provide to stimulate further price competition. For example, the customer could inform the ODD supplier about insufficient capacity of his competitor and indicate that it would attribute more volume in exchange of lowering the price. Account managers would consequently reach out to one another to find out who and why, if at all, was unable to supply the awarded volume. This information could then help the cartel participant to decide whether to accept the customer' request to lower the price, to only agree to a more limited reduction of price or to refuse the request.[158]

(b) Contacts and updates during RFQs

(122) It is a general characteristic of the cartel throughout the whole period that competitor contacts took place during RFQs, which implied two to four bidding rounds, each of them held on a separate day within a time span of up to two weeks.[159] For each round, and after coordination with the headquarters, the account managers would send their bid to the customers by e-mail.[160] By contrast to INs and e-auctions, the account managers would have more time to gather commercially sensitive information from other cartel participants. They did so regularly before and after each round and relayed the information exchanged to their headquarters that would use it to determine their bidding strategy for the next bidding round.[161]

(123) The exchange of information between rounds of RFQs was focused on desired positioning, aggressiveness, and rankings obtained after each round. For example, as regards ranking, account managers would ask each other: […] or*[...]*. By contrast to

153 ID […]; ID […].
154 ID […].
155 ID […].
156 ID […].
157 ID […], ID […], ID […]; ID […].
158 ID […].
159 ID […].
160 ID […].
161 ID […].

INs and e-auctions, account managers would[…][162] In this respect, they would inform each other of price ranges and of prices below which they intended not to quote.[163][…].[164]

(124) It appears that until October 2007 information exchanges would originally be concentrated to take place towards the end of RFQs.[165] Moreover, the file contains many pieces of internal reports regarding exchanges of information in between rounds of individual RFQs. These exchanges concerned ranking, prices or price ranges, pricing strategy for the next rounds and supply status with the view to achieve the desired ranking (see for example recitals (201) or (206)).

(c) Contacts and information updates to prepare bilateral negotiations with Dell and HP

(125) During bilateral face-to-face negotiations held with Dell and HP the cartel participants could be provided with guidance as to the price that the customer would require to award specific volume. Evidence shows that the cartel participants would double check any such information with each other, to find out if this information was accurate (particularly if customers would exert pressure on prices by providing ODD suppliers' information regarding positions of their competitors).[166]

(126) Thus, in complement to information gathered prior to events, the cartel participants would, during bilateral negotiations, exchange information on the intended pricing of competitors.[167] For example, by asking "*[...]*" or "*[...]*" the cartel participants would be led to discuss their pricing intentions and price ranges and other information they would discuss prior to events (see Section 4.6.1.1).[168] The cartel participants could also ask each other not to lower the price any further (see recital […]).

(127) Moreover, the cartel participants also gathered information on the status of negotiations with other competitors. With regard to negotiations conducted by Dell, rankings and share allocations were normally not fixed until all the negotiations were concluded. If, for example, HLDS negotiated with Dell before PLDS, HLDS could fear that PLDS would agree to a significant price drop influencing the share of HLDS.[169] This holds true for the other ODD suppliers too. One can infer from the file that the cartel participants maintained the contacts with one another and were willing to release information since it was in their interest to secure their positions where negotiations had been concluded for them but were still ongoing for their competitors (see recital (190). This also explains the high number of phone calls among account managers of at least HDLS, TSST, PLDS and Sony/Sony Optiarc held during bilateral negotiations.

4.6.1.3. Reciprocal commitments on ranking and/or price

(128) There is evidence that information exchange led most of the time to at least an understanding on positioning or prices in bidding events. What the competitors

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162 ID […]; ID […].
163 ID […].
164 ID […]; ID […].
165 ID […].
166 ID […]; ID […].
167 ID […].
168 ID […].
169 ID […].

sometimes called […] meant that they would upgrade their information sharing to a phase where they would actually come to concrete assurances.[170] Generally, as a result, the cartel participants would gain comfort to bid less aggressively.[171] In effect, this enabled them to obtain desired results or at least to get closer to them both in terms of price and volume and, all other circumstances being equal, to maintain the existing level of prices.

(129) Ranking agreements were typically bilateral. [*Employees*] generally had recourse to them when they did not fear competition from the other participants. Thus, they would usually exchange concrete assurances for a pending bid when they were the only two participants[172] (see also recitals […], but also, in events with more than two participants, they would typically do so either where the remaining participant was considered as sufficiently marginal not to compete significantly with the other two[173] or where the remaining participant(s) indicated its intentions to at least one of the other that it intended to stay at its existing price level rather than lower it[174].

(130) For the sake of completeness, the file contains many indications that even in cases where two of the participants reached a reciprocal commitment on their bids for a pending event, they would still engage in contacts with the remaining participants in order to make the event as transparent as possible.[175]

4.6.2. Information exchanges related to the overall strategy of each cartel participants

(131) In addition to the rigging of individual bids, the cartel participants exchanged commercially-sensitive information in relation to both Dell and HP. They always assessed information specific to one customer in light of information regarding the other customer with the objective to obtain overview, as complete as possible, of each other's overall competitive strategies, strengths and weaknesses. Further, keeping track of competitors' situations across customer accounts would also help eventually detect incorrect information provided by competitors, for example regarding their available production capacity.[176]

(132) In addition to monitoring of prices and volumes relating to bidding events, the cartel participants also exchanged information concerning pull status and production capacity, inventory status, technology or quality problems and other issues useful to determine one's business strategy, such as hit rates, refresh cycle of products and purchase prices of ODD components. They also shared precise figures regarding their supply volumes and performances (see for example recital (195)).[177]

(133) Contemporaneous evidence contains a large number of instances of internal reporting of HLDS, PLDS, Sony Optiarc and Quanta reporting about their own conversations with competitors […]. Most of the time, these are short reports circulated once the ODD suppliers would obtain information worth immediate reporting, for example, the final results after a bidding event. Exhaustive reports were usually circulated

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170 ID […].
171 ID […].
172 ID […] (regarding HP's e-auction in November 2005); ID […] (regarding Dell's IN in June 2004); ID […] (regarding HP bPC's e-auction for DVD-ROM in August 2006).
173 ID […].
174 ID […]; ID […].
175 ID […], ID […].
176 ID […]; ID […]; ID […].
177 ID […]; ID […].

prior to upcoming events which contained all information the ODD suppliers were able to gather, including final results in the past bidding events, pull statuses, information on qualification and line up statuses and so on.

(134) Moreover, in case of […], information from internal reporting was further processed […] (see recital (139)).[178]

4.6.2.1. Monitoring of prices and volumes

(135) The cartel participants monitored prices and volumes awarded in bidding events (TAMs). They mostly did so shortly after the bidding events were closed and customers communicated to each of them their own result: what ranking (and hence volume) they obtained for their final quote (see recital (69)).

(136) In the setting of this cartel, information on pricing in past events was of particular importance for several reasons. First, when determining the pricing strategy or setting a specific price to a customer, prices quoted by other ODD suppliers to this customer or to the other customer generally served as benchmarking.[179] This was all the more useful since both Dell and HP required the same products and prices were therefore similar. Thus, competitors' prices for both customer accounts enabled the cartel participants to foresee their competitors' positioning in future bidding events, to predict the development of prices in individual auctions and adjust their own pricing strategy accordingly.[180]

(137) More importantly, prices in past bidding events almost always served as initial prices in upcoming bidding events.[181] This meant that a ODD supplier was only allowed to start bidding with a minimum opening bid either equal to or lower than his own previous price quoted for the same product in the previous event.[182] Accordingly, each ODD supplier generally had its own initial price. Therefore, by exchanging information on past prices cartel participants de facto revealed what price they would start their bidding with in an upcoming bidding event. Even where initial price did not appear to be imposed by customers, ODD suppliers typically started their bidding at their level.[183] In combination with other information exchanged between the parties, such as desired ranking and bidding intentions in upcoming event, this exchange removed a great deal of uncertainty regarding the course of the bidding.

(138) There is a large number of reporting, […], about monitoring of prices and rankings (volumes). The evidence […] indicates the existence of such exchanges from 2004.[184] Moreover, there were also instances where ODD suppliers exchanged the quoted prices in closed events knowing that the procurement would still continue.[185]

(139) Contemporaneous evidence further includes […],overview of prices offered for various ODDs, […], by […],[…]. So called […] covered progressively a period […] from […]regarding ODDs such as CD-ROM, DVD-ROM, Combo, 9.5 Combo, DVDRW, and so on.[…]. Such[…] were reported to have formed a basis[…] such as

178 ID […]; ID […], ID […].
179 ID […]; ID […]; ID […]; ID […]; ID […].
180 ID […].
181 ID […], ID […].
182 For example; ID […]: […] (ID […]).
183 ID […]; ID […]; ID […]; ID […].
184 ID […].
185 ID […].

that called […] (see recital (134)). […] contained prices and awarded volumes regarding all of the above ODD suppliers[…]. [186] Most of the data was obtained through exchanges of information with other competitors.[187]

(140) Also, information about ODD suppliers' volumes awarded in a bidding event of a customer, and all the more so when taken together with other collected information (see recitals (145), (146) and (151)) was important for future competitive strategy since it could have impact on the other customer account and ODD suppliers' available capacity vis-à-vis this customer. It was explained, by way of example, that[…].[188] This impact of past results on future competitions is corroborated by contemporaneous evidence: *"*[…]*' target was No2 not no 1. They don't have problem in capacity but potential issue in material supply. […] TSST's targeted No 1 but got No 3. So they will aggressively quote e-RFQ […]".*[189]

(141) Account managers at least at Philips, Lite-On, PLDS, Sony Optiarc and Quanta would communicate in their internal reports the prices quoted by their competitors as they were able to obtain them through direct confirmation with their counterparts at cartel participants usually just after the bidding event closed.[190]

4.6.2.2. Information exchange on actual ODD sales (pull status information)

(142) The evidence shows that the account managers for Dell and HP exchanged with their counterparts at cartel participants information on pull status […]) to find out how many ODDs were actually sold (pulled) to each customer.[191] The number of actually purchased (pulled) ODDs was usually different from volumes (TAMs) that were attributed based on the participants' ranking in a bidding event. Information on pull status provided an accurate view about ODD suppliers' actual available production volumes and supply capacity and thus perfected information on awarded volumes (TAMs) acquired through monitoring after events.[192] Information on pull status was also helpful to verify whether ODD suppliers were getting volumes they were awarded.[193]

(143) […] HLDS and Lite-On, and later PLDS, exchanged pull status information regarding various ODDs via a chart created by […]' account manager for HP.[194] Also account managers for Dell, […] ([…]) and […] ([…]), exchanged monthly the forecasts of supply to establish Dell's annual pull out volume and HLDS' share in this volume.[195] Further, there are large numbers of internal reports containing pull status data of at least HLDS, TSST, Lite-On, later PLDS, Sony and later Sony Optiarc.[196]

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186 ID […].
187 ID […]; ID […]; ID […]; ID […].
188 ID […].
189 ID […].
190 ID […].
191 ID […]; ID […].
192 ID […]; ID […]; ID […].
193 ID […].
194 ID […]; ID […]; ID […].
195 ID […]; ID […].
196 ID […]; ID […], ID […],

(144) Evidence further contains […] which contained […] at least regarding, […]. One contained […] of slim ODDs from […]until […].[197] The other contained […] of HH ODDs for HP bPC account from […] until[…].[198]

4.6.2.3. Information exchange on qualification status

(145) Account managers for Dell and HP also exchanged information on their qualification statuses. This information would reveal whether a particular ODD supplier had passed a customer's qualification process for a particular product or model so as to be eligible to participate in bidding events. Where the qualification plan for a competitor's new product was delayed, usually for technical reasons, the customer was likely to cover its requirements with other ODD suppliers in the interim. Information on qualification thus gave an indication to each ODD supplier on its direct competition and allowed the holder of such information to plan its production volumes.[199] Further, it could reveal what component parts were used by ODD suppliers or what was their cost structure.[200]

(146) Moreover, results of the qualification status, a so called Quarterly Business Review ("QBR"), would frequently have an impact on the position of each ODD supplier in bidding events. Process of qualification at Dell was achieved via QBR score whereby Dell evaluated individual features of ODDs under qualification (see recital (38)).

(147) As for the qualification with HP, ODD suppliers could be attributed either a so called cost advantage or cost disadvantage. ODD suppliers who enjoyed a cost advantage (cost benefit) could deduct this value from their quoted price and thus achieve a better ranking. On the other hand, cost disadvantage (cost handicap) increased the quoted price.[201] With dis-/advantage amounting up to 40 or 60 dollar cents, this cost could have a decisive influence on the price and on the final ranking.[202] The cartel participants shared this information.[203]

(148) Since June 2008, HP mPC distinguished between ODD suppliers of Tier 1 (most often HLDS, Quanta, [non-addressee] and [non-addressee]) and Tier 2 (TSST, PLDS and [non-addressee]). Tier 1 ODD suppliers went through a lengthy qualification process and were awarded around 60% of total mPC demand. Tier 2 ODD suppliers could bid for the remaining share. Tier 2 could not compete for Tier 1 share but could compete for Tier 2 shares.[204] There is evidence that PLDS informed HLDS of its QBR scores which would influence how HP was going to allocate volumes.[205]

(149) Many pieces of contemporaneous evidence prove exchange of information among the cartel participants regarding qualification process with Dell[206] and HP[207] and the

197 ID […].
198 ID […].
199 ID […]; ID […]; ID […].
200 ID […].
201 ID […].
202 ID […]; ID […].
203 ID […]; ID […]; ID […].
204 ID […].
205 ID […]; ID […].
206 ID […]; ID […]; ID […] (dated August 2007 regarding Sony Optiarc).
207 ID […]; ID […]; ID […].

resulting QBR scores. […]' […] referred to in recital (134) also contains information on […] regarding at least[…].[208]

4.6.2.4. Information exchange on line up status and launch of new products

(150) [Employee titles] for Dell and HP of HLDS, Lite-On, Philips, PLDS, Sony (later Sony Optiarc) and TSST further exchanged information regarding so called line up status of ODDs.[209] This included information about when and at what price ODD products were *[...]*, whether they were about to be *[...]*)[210] or subject to *[...]*[211] as well as on launch of new products. Specifically, they exchanged information on timing of such line up statuses or product launches and sometimes on their prices.[212] By collecting this information from competitors, the cartel participants could determine or adjust their own strategy in terms of pricing and timing schedule for introduction of upgraded or new products.[213]

(151) Information about line-up status had an impact on competitors' strategies in upcoming bidding events.[214] For example, a competitor introducing a product refresh was likely to be more aggressive during upcoming events in order to dispose of its left over stock.[215] Information about EOL products in combination with information on excessive inventory would mean that the cartel participant was likely to bid more aggressively, especially when the customer agreed to pull all the stock of the EOL product.[216] Account managers also collected information about RTS prices which was a final price inclusive of all costs and its timing.[217]

(152) Given that ODD technology was mature and the quality and technological difference between the new products launched by different ODD suppliers were no longer significant, introduction of new models was used as a means to drive the price down to win more volume. This is why competitors' product launches had to be factored in when setting own prices.[218]

(153) […]referred to in recital (134) also contained information on […] of at least [competitors] from[…].[219] Contemporaneous evidence about exchanges of line up statuses include, for example, […] from October 2006.[220]

4.6.2.5. Other information exchanges such as quality issues, supply constraints

(154) The cartel participants exchanged all other information directly or indirectly linked to procurement by customers. When information was gathered on the BOM costs[221] of

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208 ID […].

209 ID […].

210 The refresh of products stood for reintroduction of an existing product upgraded with new features and/or with new technology or components integrated.

211 ID […].

212 ID […]; ID […]; ID […].

213 ID […]; ID […].

214 Examples include: ID […].

215 ID […], ID […].

216 ID […]; ID […] (regarding HP mPC's RFQ in April 2008).

217 RTS was usually used for introducing new generation products. RFQ price could still be changed before RTS. ID […]; ID […]; ID […], ID […].

218 ID […].

219 ID […].

220 ID […]; ID […].

221 "BOM cost" means Bill of material cost. See ID […].

competitors, one could approximately determine how far the competitor could drop its price during an event.[222]

(155) They exchanged information on cost adders, a penalty added to an ODD supplier's price based on prior supply and quality issues. In fact, the more supply or quality problems a competitor had, the higher their cost adder was.[223]

(156) The cartel participants also exchanged information concerning production or quality issues.[224] Quality issue of one ODD supplier or his penalisation by a customer would have an impact on the position of the others in upcoming events.[225]

(157) Occasionally, information about inventory statuses was also exchanged between the cartel participants.[226] The existence of inventory status was capable of affecting the price/rebates the ODD suppliers could grant to their customers because of higher volumes of shipped ODDs.[227]

4.6.3. Chronology of information exchanges and reciprocal commitments related to specific procurement events

(158) This Section recounts the evolution of the cartel in time by presenting details of some key evidence. […]. Both corroborate information regarding the general functioning of the cartel in relation to relevant procurement events.

(159) The duration of the cartel was from 23 June 2004 until 25 November 2008. However, the undertakings participating in the infringement varied throughout the duration of the infringement. We have, on the one hand, undertakings that formed an integral part of the cartel for (nearly) the entire duration (HLDS and TSST), and on the other hand, there is a number of undertakings which participated in the cartel activities for a shorter period of time.

(160) During the initial period between 2004 and 2006, the cartel was formed by HLDS, TSST, Philips, Lite-On and Sony. Philips' participation ended in 2006 following the transfer of its ODD business to PLDS[228], which participated in the infringement until the end of the infringement. Moreover, Sony's participation ended in 2006 and the participation of Lite-On later ended in 2007[229].

(161) On the other hand, in mid-2007, Sony Optiarc joined the cartel and was subsequently followed by Quanta at the beginning of 2008.[230]

Year 2004

(162) Since at least 2004 onwards, due to the considerable slowdown of technological innovation in the ODD market, price became the key parameter of competition

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222 ID […]; ID […].

223 ID […]; ID […]; ID […]; ID […], ID […].

224 ID […]; ID […]; ID […]; ID […].

225 ID […], ID […]; ID […]; ID […]; ID […].

226 ID […]; ID […].

227 ID […].

228 A joint venture between Philips and BenQ, (as of 2007 between Philips and Lite-On), for more information see Section 2.1.3.

229 The participation of Lite-On was terminated following its take-over of BenQ's holding in PLDS in March 2007 (for more details, see Section 2.1.3).

230 Sony Optiarc and Quanta also cooperated in the production and sales of ODDs, for more details see Section 2.2.

between ODD suppliers.[231] TSST succeeded in taking up the position of the leading ODD supplier to Dell from HLDS.[232] Other competitors were Sony, Lite-On and Philips. Amongst those competitors, Sony and Lite-On had a contractual arrangement whereby Sony purchased ODDs from Lite-On and took care of sales for Dell (see recital (26)).

(163) […][233] […]. […].[234]Contrary to TSST's argument contesting the credibility of […][235], […].[236] Further, […]. Contrary to TSST's claim that the drop in August and September prices compared to prices in June and July refutes the existence of any agreement[237], […]:.[238]

(164) TSST also disputes the source of the information on prices of TSST (referred to as "*SS*") […].[239] […].

(165) […][240]. […][241] […][242] Contrary to TSST's argument that […] relating to these contacts would be speculative[243], the contemporaneous evidence supports the conclusions made […]. […].[244] Furthermore, […].[245] Finally, […].[246]

(166) In August 2004, contrary to TSST's and Sony/Optiarc's claims[247], […] (Sony) had collusive contacts with HLDS and […] (Lite On) had similar contacts with TSST. These contacts took place in the context of the negotiations whereby Dell was aiming at lowering pricing of all *"Chassis 05"* drives by replacing the rails with screws.[248] [...].[249] Contrary to Sony/Optiarc's arguments, […]'s report of 24 August 2004, listing HLDS' price ([…]), and TSST's price ([…]) as well as other evidence quoted in this recital demonstrate that Dell provided inaccurate information to drive the prices down as evidenced by [...]'s email sent one day prior to [...]'s report on 23 August

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231 ID […]; See also Commission Decision N° COMP/M.4502 *LITE-ON/PBDS*, paragraph 29, according to which "*Innovation cycles appear to be very short, and can often be less than a year. Moreover, the PC ODDs suppliers appear to be able to adapt quickly to any new technology.*" See further: A Tale of Two Standards: Patent Pools and Innovation in the Optical Disk Drive Industry (draft) by Kenneth Flamm University of Texas at Austin, December 2011, available at http://conference.nber.org/confer/2012/IPKE/flamm.pdf which reads on page 26: "*Despite differences in index weights, the two indexes broadly display a remarkably consistent picture of slowing innovation in optical disk drives. The various indexes seem to have considerable noise, and show somewhat divergent changes from year to year, but broadly speaking, all of the indexes show a notable trend toward diminishing rates of price decline in recent years.*"

232 ID […].

233 IN for HH Combo for August and September 2004 held on 24 June 2004.

234 ID […]; ID […].

235 ID […][…].

236 ID […]; ID […]: […].

237 ID […][…]ID […].

238 ID […]; ID […].

239 ID […][…].

240 Dell's IN for CDRW for supply period of October, November and December 2004

241 ID […], ID […]; ID […]; ID […].

242 ID […].

243 ID […]; ID […][…].

244 ID […], ID […].

245 ID […].

246 ID […]; ID […].

247 ID […][…]; ID […][…].

248 ID […], Dell's pressure on the price is reflected also in ID […].

249 ID […].

2004.[250] […] (Sony) therefore contacted one of his competitors in order to double check the reliability of Dell's information[251] and the same was also done by […].[252] Further, the evidence demonstrates that the provision of incorrect pricing information by Dell as referred to in the email of […] (Sony) on 23 August 2004 rules out Dell as the source of the pricing information that were communicated in [...]'s and [...]'s email sent only one day later. Moreover, contrary to Sony/Optiarc's arguments, nothing in the email chain indicates that [...] (Sony) was pressuring Lite-On to lower its prices for screws.

(167) Similar to the facts in recitals (163) and (165), […] and […] concluded each ranking agreements with their counterparts from, or acting on behalf of, TSST, in relation to Dell's IN for Slim Combo conducted on 15 September 2004.[253][…].[254] Contrary to TSST's arguments[255], […][256]. […].[257]

(168) Secondly, contrary to TSST's contestation[258], […].[259] […].[260] Moreover, […] confirms the anticompetitive contacts [...] during the bidding: "[…]."[…]."[261]

(169) Contrary to TSST's assertion that even if ODD suppliers communicated, its aggressive competition for the first rank and unexpected course of bidding refuted any agreement with Philips and HLDS, the evidence […] shows that TSST shared with competitors its intention to aim at a higher ranking than the third rank. Moreover, the auction for November finished […]. The *"unexpected"* course of bidding that TSST refers to, shows that Philips behaved in the December auction unlike the cartel members had agreed. This can be explained either by the fact that Philips did not feel bound by the agreement anymore because of HLDS' aggressive behaviour during the auction as well as by the fact that […] was during the auction on the plane and unable to take calls […]. Moreover, TSST's argument that TSST started a price war is contradicted by the contemporaneous evidence that shows that it was actually TSST, which called […] several times during the bidding process in order to agree on the split of the IN.

(170) Contrary to what Sony/Optiarc argues[262], [...] (Sony) had also other contacts with HLDS around 21 September 2004 in relation to the negotiations with Dell for lead free pricing. According to [...] internal reports of 21 and 24 September 2004 (with Lite-On in copy of the message), he obtained information about *[...]* while clarifying, first, that, […]and, later, "[…]". [...] further asked [...] to […] while [...] confirmed he would do so.[…][263] Despite that [...]'s mobile phone records do not

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250 ID […]. [...] wrote in the email amongst other: "[…] *[*

251 ID […]. [...]'s report sent on the same day updates on the outcome of his checking with competitors by saying: […]."

252 ID […].

253 This IN was held by Dell on 15 September 2004 for the supply period from November to December 2004.

254 ID […]; ID […].

255 ID […][…].

256 ID […]; ID […].

257 ID[…]; ID […].

258 ID […] […]

259 ID […]; ID […]; ID […]: […]. The IN started at 6:30 a.m. and lasted for four hours (ID […]).

260 The internal […] email sent by [...] said in this regard that[…], ID […].

261 ID […]; ID […]; ID […]: […]. The IN started at 6:30 a.m. and lasted for four hours (ID […]).

262 ID […][…].

263 ID […].

show communications at this time, as argued by Sony/Optiarc, the express wording of [...]'s reports confirm Sony's contacts with HLDS. This is consistent with the fact that [...] (Sony) eventually requested [...] (Lite-On) to check this information precisely with them. While Sony/Optiarc acknowledges that [...]'s emails include other competitors' pricing, it denies that this information raised any competition concerns. This argument must be rejected. [...]'s actual interest during on-going negotiations with Dell to contact again HLDS and TSST in order to verify competitor information rebuts Sony/Optiarc's argument that competitors' pricing information contained in the email was not relevant for Sony's own business. Finally, contrary to what Sony/Optiarc argues, lead-free pricing cost adders (in the range […]), in particular if they are tendered on a separate basis from prices of drives, represent a relevant cost component of any drive price in an industry in which the price, and not the technology, is a leading factor and where bidders' prices for drives may vary in the range of cents (see recital (168)). This is, in any case, consistent to what Sony/Optiarc acknowledges elsewhere in its reply to the SO that in this industry even small differences in price are significant.[264]

(171) In November 2004, […][265], similar to these described in recitals (163), This is documented by […].[266] Contrary to TSST's argument[267], nothing in this piece of evidence rebuts the existence of TSST's collusive contacts with HLDS regarding the INs for both products. On the contrary, […] is supported by […] which, read together with Dell's bidding records, show for each IN three calls with […] (TSST) during the bidding out of which two were incoming from TSST.[268] Moreover, […]'s (TSST) reference to his inability to negotiate did not mean that there was no room for an agreement between TSST and HLDS as suggested by TSST in its reply. It is evident from the email that […] only referred to the existence of the guidance from TSST's headquarters to rank first in the CDRW competition, which had to be followed by […]. Due to this guidance, […] could not split the first place in the CDRW bid with […] as was the case for the DVD-ROM. As the internal […] report sent by […] shows, […] accepted this without any problems and contestations.

(172) Prior to INs held by Dell on 3 and 4 November 2004, and contrary to Sony/Optiarc's arguments disputing its involvement in collusion regarding both INs[269], two pieces of evidence, […], ascertain that […] (Sony) discussed strategy in the IN for HH DVD-ROM with at least […]. On 3 November 2004 […].[270] […].[271] Contrary to Sony/Optiarc's argument, however, it is apparent that […] confused […] with […] who, at that time, worked neither in Sony nor in [non-addressee]. Sony's involvement in the contacts with HLDS (as well as the personal involvement of […]) is further corroborated […]: "[…].[272] […].

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264 ID […][…].

265 IN were held by Dell on 3 and 4 November 2004 for the supply period from January to February 2005.

266 ID […]; ID […].

267 ID […][…].

268 ID […]; ID […]; ID […]: On 3 November 2004 the bidders submitted their bids between 8:05 and 9:05 a.m., and the phone calls […] (see ID […]).

269 ID […][…].

270 ID […].

271 ID […]: […].

272 ID […], ID […], ID […].

(173) Contrary to Sony/Optiarc's claim contesting its participation in Dell's IN for HH DVD-ROM with Lite-On[273], […]. […].[274] Moreover, [...]'s vivid involvement in the contacts with Sony's competitors indicates that Sony had a great interest in knowing the intended bidding strategy of its competitors.

(174) Lastly, TSST's and Sony/Optiarc's arguments that even if the exchanges took place, the bidding was aggressive, independent and does not support collusion[275] are contradicted not only by […], circulating the prices of Sony and TSST (saying that[…]) but also by Dell's bidding records. These bidding records ascertain that at least the first part of the IN for January 2005 ended as foreseen in the cited 2 and 3 November reports.[276]

Year 2005

(175) In 2005, HLDS and Lite-On started to have the same types of contacts concerning supplies to HP as they had concerning supplies to Dell (see recital (179)). Since at least 2004 until 2006 HLDS and Lite-On were the main ODD suppliers for HP bPC. It stems from the file that a particularly close bilateral relationship appears to have been built between […] at HLDS and Lite-On (and later PLDS). TSST started supplying HH CDRW and HH DVD-ROM to HP bPC in 2006 and HH DVDRW in April 2007. […]. […].[277]

(176) In February and March 2005, contrary to what Sony/Optiarc argues[278], in addition to contacts between [...] (HLDS) and [...] (TSST) there is also evidence involving Sony […]. […], after Dell's IN for HH Combo[279], […].[280] Although, as Sony/Optiarc argues[281], available phone records only show […] calls with […] (TSST) on 24 and 26 February 2005 (and not with Sony or Lite On)[282], the […] identifies Sony and TSST as sources of information. The missing entry for the call with Sony only means that […] (HLDS) contacted Sony by different means, for example from his fixed line.

(177) On 3 and 4 March 2005, […].[283] TSST disputes the reliability of […] and argues that […] are not supported by contemporaneous evidence.[284] This argument must be rejected. Dell's bidding records as well as […] corroborate […].[285]

(178) Sony/Optiarc contests a number of competitor contacts […]. In relation to Dell's IN for HH DVD-ROM held on 27 April 2005, Sony/Optiarc argues that although […], it is not clear if [...] spoke to Sony or Lite-On, the information is vague and therefore there is no basis for a claim that Sony engaged in improper behaviour. These

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273 ID […][…].
274 ID […].
275 ID […][…]; ID […][…].
276 ID […]:[…]; ID […].
277 ID […]; ID […]; ID […]; ID […].
278 ID […][…].
279 This IN was held on 24 February 2005 for the supply period of April and May 2005; ID […] (excels 183, 184).
280 ID […].
281 ID […][…].
282 ID […].
283 ID […].
284 ID […][…].
285 ID […]; ID […]: […].

arguments cannot be accepted. Although, as Sony/Optiarc argues[286], available phone records only show […] (HLDS) calls with […] (TSST), including calls during the bidding on 27 April 2005 (and not with Sony or Lite-On)[287], […][288] and identified therefore also Sony as source of information.[289] As already explained in recital (175), the missing entry in the phone records only means that […] (HLDS) must have contacted Sony by different means, for example from […] fixed line. Contrary to Sony/Optiarc's argument that the information was vague or inaccurate, the mere fact that the information was worth circulating internally […] sufficiently demonstrates the relevance of this information for HLDS' business decisions.[290]

(179) On 30 November 2005, HLDS and Lite-On rigged the bids in relation to HP's CD-ROM, DVD, DVDRW and Combo e-auction in November 2005.[291] Also prior to the event HLDS informed Lite-On that it wished that competition would not be so tough.[292] […].[293]

(180) In relation to a series of Dell INs held in December 2005, […], Sony/Optiarc argues that there is no evidence of meaningful contacts between Sony and HLDS.[294] This argument must be rejected. […].[295] Contrary to what Sony/Optiarc argues, […].[296] Moreover, […].[297] The Commission acknowledges that a brief phone conversation of less than one minute (which was the case for the call with Sony) could also mean that the phone call did not take place, however […]. The evidence also disproves Sony/Optiarc's argument that […] would show an intense competition during this procurement. […].[298]

Year 2006

(181) In 2006 same types of exchanges as during the previous years continued to take place between HLDS, TSST, Lite-On, Philips (later on PBDS) and Sony (which terminated its participation in the contacts in September 2006, see recital (194)), whereby they coordinated their approach to Dell. With respect to the HP account, TSST's importance grew. […].[299] […].[300]

(182) Following the first documented contacts in 2005 regarding HP (179), there is evidence that bilateral contacts took place at the level of top management of the cartel participants. […] (Lite-On), […], had bilateral contacts with at least […]

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286 ID […][…].
287 ID […].
288 ID […].
289 The intentional identification of the source of information as Sony becomes even more apparent when reading the rest of the email which constantly refers to prices of Sony/LT and not of Sony. The identification of the source is therefore the only instance throughout the email where Sony appears in isolation.
290 ID […].
291 ID […]; ID […]; ID […]; ID […].
292 ID […]; ID […].
293 ID […].
294 ID […][…].
295 ID […].
296 ID […].
297 ID […].
298 ID […].
299 ID […]; […] ID […].
300 ID […]; ID […]; ID […].

(HLDS) […], in the position of […] in relation to upcoming procurement events. Apart from these contacts, […] had phone contacts with at least HLDS regarding price levels at least once a month whereby they would give an indication of the price level below which they would not quote.[301] Contemporaneous evidence internal to Lite-On and HLDS corroborates contacts between […] and […] regarding HP's procurement events.[302]

(183) […]: "[…]".[303] […].[304] TSST argues that this "*unambiguous refusal to engage in anti-competitive behaviour*" demonstrates lack of common purpose on the part of TSST.[305] Contrary to TSST's arguments, the refusal of the proposed agreement does not remove the fact that this document shows continuation of the cartel contacts […]. […].[306] Moreover, […], which include the prices of […] for this product from January 2006 to September 2006, […].[307] […][308]

(184) In relation to a series of INs conducted by Dell between 11 and 24 April 2006 for June and July prices, the file contains evidence on numerous telephone exchanges prior and on the day of the INs between […] for Dell at Philips, HLDS, Sony and Lite-On (the last two participating together in these INs[309]), and TSST […]. This is confirmed by available contemporaneous evidence.

– On 14 April 2006 […] (Lite-On) […] contact with […] (HLDS) regarding HLDS' strategy in the IN planned for 17 April.[310]

– […].[311] Sony/Optiarc submits that the […] report does not show who his *"friends"* were or that the fact that several ODD suppliers objected to Dell does not indicate a coordinated response from the ODD suppliers.[312] Contrary to Sony/Optiarc's arguments, the document shows […] talked with its competitors and they shared their strategy for the upcoming IN. […] talked to […] (Sony), […] ([…] TSST) and possibly […] (HLDS). […] would not have threatened Dell not to participate in the IN, had it not been for the coordination among all IN participants.[313] Dell's bidding records confirm that the competitors participating in this Slim Combo IN were identical with the companies contacted by […].[314]

– Regarding 20 April 2006 […] (Sony) […] after the IN for Slim DVDRW held at 6 p.m. earlier that day, whereby […] informed about his contacts with TSST[315], Sony/Optiarc argues that, even assuming that [...] spoke to someone at TSST to learn that a competitor was upset, this concerned a completed

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301 ID […], ID […].
302 Such contacts related to RFQs of HP in July 2006 (ID […]) and in August 2006 (ID […]).
303 ID […].
304 ID […].
305 ID […][…].
306 ID […].
307 ID […].
308 ID […]
309 ID […].
310 ID […]; see also ID […] and ID […].
311 ID […].
312 ID […][…].
313 ID […]; ID […].
314 ID […].
315 ID […].

procurement and shows rather lack of coordination. TSST claims that the source of the information is not evident from the email. Contrary to what both Sony/Optiarc and TSST argue[316], the wording of [...]'s email, providing TSST's prices for June and July along with reflections inherently internal to TSST (such as "they were very upset they lost July… they wanted #1 in both months") immediately after the IN clearly show [...]'s contact with TSST. Moreover, […].[317] The fact that the shared information covered a completed bidding event does not deprive the information of its business sensitivity. As already demonstrated in recital (51), information about past pricing gave a significant indication about the intended future pricing in the next RFQ. Namely, the document shows that, after the IN on 20 April which was *"for current business*", Dell scheduled another IN RFQ for this product for 24 April, which was apparently used to negotiate a price level for the next quarter.[318]

(185) On 23 and 24 May 2006, […].[319] Contrary to TSST's arguments[320], [...] identifies both "*TSST* […]" and "*TSST* […]" as "*2 sources that are giving […] the different info*" to [...]. It is further clear […] that [...] subsequently "*confirmed with* […] *again*" and found out that information from TSST's […] was correct. Similarly, on 20 June 2006 […], reported internally about a meeting regarding qualification of products that took place between him and an employee from TSST holding the position of *"*[…]*"*. In his email, […]. Contrary to TSST's argument, […].[321] Contrary to TSST's arguments admitting only a *"possibility"* that contacts involving TSST took place in May and June 2006[322], in both instances, […] […] explicitly identify employees of TSST as sources of information and prove that such occasional bilateral contacts complemented and verified information that […] for Dell and HP such as […] or […] normally gathered from their counterpart […] who were their usual contact points.

(186) In relation to the HP account, TSST contests the evidence on contacts that it had with HLDS in June and July 2006 ([…]).[323] Contrary to TSST's arguments, contemporaneous evidence […] shows inflow of various TSST-internal information, including the pricing, being made available to HLDS and Lite-On. On at least two occasions, this evidence establishes […] face-to-face contacts with TSST.

– Firstly, […]. […].[324]

– Secondly, as discussed in recital (185), […] whereby they discussed TSST's strategy concerning LS ODDs[…].

– Thirdly, an […] dated […] shows that […] met […] on 11 June 2006 to discuss the Auction. The corresponding […] report […] states in relation to this

316 ID […][…], ID […][…].
317 ID […]; ID […]; ID […].
318 ID […].
319 ID […]; ID […].
320 ID […][…].
321 ID […].
322 ID […][…].
323 ID […][…].
324 ID […].

meeting that the *"Estimated effect/Goal"* was "*checking the situation of other companies before an Auction*".[325] […].[326]

– Fourth, two […].[327]

(187) Strings of emails exchanged within Sony and Lite-On, in the context of their cooperation agreement referred to in Section 2.2.1, in relation to upcoming bilateral negotiations organized by Dell for a six month period, also shed light on the telephone contacts that took place in May and June 2006 between the account managers for Dell at cartel participants. In addition to the contacts established in available phone records ([…]), the following evidence proves that contacts involving Lite-On, HLDS, TSST and Sony existed:

– [...].[328]

– […][329]

– […][330] Sony/Optiarc argues that […]'s request to [...] (Sony) for "*all possible prices info*" referred to Sony's pricing and that there is no evidence that Sony collected any competitors' pricing.[331] The extracts from the 24 and 25 May 2006 e-mail exchanges between Sony and Lite-On disprove Sony/Optiarc's claim. It is also clear from [...]'s email of 26 May 2006 that Lite-On was supposed to provide Sony with its pricing proposal and not *vice versa*. […][332].

– […].[333] TSST claims in relation to the contact on 1 June 2006 that it is not clear whether [...] (Sony) had a direct contact with TSST, as he did not share any details concerning the contact. TSST further argues that even if this evidence established a competitor contact with TSST, no sensitive information was shared, as it concerned only past pricing.[334] Contrary to this argument, the wording of [...] 1 June 2006 report clearly demonstrates the existence of a contact between [...] (Sony) and TSST ("TSST stated [that Dell is also disappointed with TSST's cost proposal] but TSST did not stated the ranking they are position now."). Moreover, the contact did not concern past pricing, but Dell's request to lower prices in an on-going competition. […][335].

(188) The evidence described in recital (187) corroborates the presence of several elements important for this case. When contacted, the cartel participants would provide information on their own, but also on their competitors' strategy, if this was known to them.[336] […].[337] […].[338] [...].[339] […].[340] Accordingly, […] account managers at

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325 ID […].
326 ID […].
327 ID […], ID […].
328 ID […].
329 ID […].
330 ID […].
331 ID […][…].
332 ID […]
333 ID […].
334 ID […].
335 ID […].
336 ID […]; ID […]; ID […]; ID […]; ID […]; ID […]; ID […].
337 ID […]; ID […].
338 ID […]; ID […].
339 ID […].

individual undertakings were aware that contacts, although bilateral in nature, usually took place between multiple pairs of ODD suppliers in parallel.[341]

(189) Moreover, available telephone invoices prove the existence of direct contacts involving […] at Sony, HLDS, TSST, Lite-On and Philips as described in recital (186)[…]. They further show that bilateral contacts took place also with the cartel participants that did not apply for leniency.

(190) In June and July 2006, […]. had contacts with TSST concerning the status of on-going negotiations with Dell. […] TSST had provided […] with the price it had agreed with Dell. […] report of […] contains an "*update*" of competitors' prices, highlighting TSST's price in red, for various products and including the following explanation: "Overall, TSST submitted the price lower than ours and took 40% ~ 60% share. Especially, Price difference for HH Combo and Slim Combo is $1.00. Consequently, to maximize Q4 quantity we need to decrease the price at least $1.00."[342] Contrary to what TSST submits[343], […]. Moreover, an internal […] report sent on […] also refers to an earlier contact with TSST ("TSST told me") ([…]).[344] It further follows from […] report of […] that while TSST closed its negotiations with Dell, the negotiations between Dell and […] were still on-going, even after[…].[345] […].[346] Moreover, as […] did not undercut the price of TSST and, despite pressure from Dell, quoted the price of the same level, so that TSST secured its position. The exchange had thus been beneficial for both of them.

(191) The evidence regarding Dell negotiations in June and July 2006 also points to the fact that contacts at least between […]. and TSST in relation to the Dell account were systematic. […].[347]

(192) Lite-On and HLDS were in contact between 31 August and 1 September 2006, as both competitors wanted the first rank in the RFQ for DVD-ROM PATA and SATA conducted by HP. […].[348]

(193) […].[349] […] [350]The next RFQ for DVD-ROM SATA was organised by HP in October 2006. Lite-On and HLDS could not reach an agreement on pricing, however they continued to coordinate the pricing and as a result, Lite-On made a minor adjustment to its price.[351]

(194) In relation to Dell's offline negotiations[352] in September 2006, contrary to TSST's arguments[353], […]'s (Sony) report of 15 September 2006[354], with Lite-On in copy of

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340 ID […].
341 ID […]; ID […].
342 ID […].
343 ID […] ([…]) regarding missing source of information in contemporaneous evidence and […]; ID […][…].
344 ID […].
345 ID […].
346 ID […].
347 ID […].
348 ID […]; ID […].
349 ID […].
350 ID […]
351 ID […]; ID […].
352 Dell negotiation took place for prices from October 2006 to January 2007 and succeeded negotiation in July 2006.
353 ID […][…].

the message, refers to contacts between [...] and "*two key competitors*" for HH Combo prior to submitting its price to Dell. Sony/Optiarc argues that no names are provided by […], but […] report of […], discussed in recital (190), makes clear that Sony's only two competitors for this product were HLDS and TSST. Moreover, the identity of the two key competitors is anyway not relevant, as the email clearly evidences price related contacts with competitors covering a specific ODD model of Dell. Sony/Optiarc further addresses the following reference in [...]'s internal report "*I have heard from our 2 key competitors that they will be aggressive to keep the TAM they have in Q-3. This combined with a new supplier fighting for a slot makes this offer out of line. We need to get close to the Dell requested price of $18,65 by at least January*". Sony/Optiarc argues that this only meant that […]. Sony/Optiarc argues that because […] did not obtain any specific future pricing or supply information, the contacts only spurred further competition and caused reduction of prices.[355] Sony/Optiarc's arguments are not supported by the cited contemporaneous evidence. […] indeed obtained both price related and supply related information from the two competitors ("*they will be aggressive to keep the TAM [meaning they will submit low prices in order to keep their shares]*"). Moreover, despite what Sony/Optiarc argues, […].[356] […].[357]

(195) As explained in recital (132), the cartel participants updated each other on the status of their capacity. Contrary to what TSST submits[358], […], thereby identifying TSST' […] as source of information. […].[359]

Year 2007

(196) Contacts among HLDS, Lite-On (later PLDS) and TSST continued uninterrupted in relation to Dell. As of July 2007 Sony Optiarc also had anticompetitive contacts. In October 2007 Dell relocated its procurement team to Singapore and the majority of the cartel participants followed it. Accordingly, HLDS, PLDS and Sony Optiarc appointed new account managers responsible for Dell. The account managers at TSST remained the same.

(197) In relation to HP's RFQs, contacts continued mainly between HLDS, Lite-On (later PLDS) and TSST ([…]). Since October 2007 the information exchanges intensified in the sense that they started to take place already at the very beginning of RFQs between the first two rounds. The reason was that in order to stimulate price competition in the first two bidding rounds, HP mPC introduced penalty scheme taking away volume awarded to high ranked ODD suppliers if they achieved low ranking in the first rounds.[360]

(198) On […], […] reported […] about information obtained from TSST in relation to HP mPC's RFQ for March prices: *"*TSST wants to be no. 1 in any cases and thinks that they need to go as low as $33.50 to be no. 1. (When I ask what they will do after April, they say that they will decide it at that time)*"*. Consequently, […] asked […]: *"*[…] *Do you think we need to give them of some hints of our price strategy in March*

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354 […].
355 ID […][…].
356 ID […].
357 ID […].
358 ID […][…].
359 ID […].
360 ID […].

RFQ to prevent them from going too aggressive? Though I don't want to do it and I should not do it, as TSST has different logic compared to other suppliers (securing share rather than profit)…"[361] Contrary to TSST's argument that the source of the information would not be clear[362], the quote from […] internal email shows that the information came directly from TSST. […].[363] The [*documents*] mentioned in this recital show that TSST shared with […] the content of its discussion with HP ([…] of[…], […] says that he "confirmed from TSST that [HP] made it clear that if the price position is the same, [HP] would give benefit to […]") and its pricing strategy in the upcoming RFQ. With this information received from TSST in mind, […].[364] This is again an example showing how ODD suppliers exchanged their ranking ambitions and the corresponding pricing intentions. In this instance, by communicating that it aimed 1st rank and indicating its price intention, TSST divulged its strategy […]. The situation described in this evidence resembles other instances documented in the file such as the events in […].[365]

(199) In January 2007, similar contacts took place in relation to Dell. TSST[366] contested that those contacts took place. Nevertheless, the evidence shows contacts, also involving TSST, concerning price proposals between February and April 2007.. […]: "*Today I spoke with [Dell] and the PMs [product managers] of other companies to understand the current situation*." […] […], this evidence demonstrates post-bidding contacts with other ODD suppliers to figure out the price gaps with their own bid with the perspective of further bilateral price negotiations and possibly resist granting too large discounts.[367] […].[368] TSST also argues that the information […] reported on 23 January 2007 was not capable of influencing competitors' behaviour and that it was Dell who disclosed competitor information. Both arguments must be rejected. The pricing information exchanged between competitors was by its nature commercially sensitive because the auction results were considered to be business secrets that influenced subsequent tenders and the overall business strategy of the participants (see recital (340)). Moreover, while at both points in time the negotiations with Dell had not yet been finalized, the evidence shows that […] was, firstly, under pressure from Dell to lower the price for a higher volume and, secondly, it did not consider information from Dell as trustworthy ("[Dell] told the cost gap is over $0.7, but realistically the gap with our company might be […]", "Even though [Dell] exaggerate (if he doubled the cost gap, then it might be $0.35) …"[369]).

(200) On […] […] reported […] in relation to Dell's IN. In […] mail of […] […] states that "*[…] checked with [non-addressees] of this decision] and they confirmed that these two vendors were almost ranked last. Through […], I asked the rank of […] and they confirmed that they failed to rank 1st too. In conclusion, one of the companies among TSST, […], must have ranked 1st, but lied about it. Although TSST is our competitor,*

361 ID […].
362 ID […][…].
363 ID […].
364 ID […].
365 ID […].
366 ID […][…].
367 ID […]; ID […]; ID […].
368 See […] and ID […].
369 ID […].

they would know that I can contact others so I do not think that TSST lied. […] will not lie, considering the relationship we have had so far. … [I] have asked […] *about pricing and rank … […]*.".[370] TSST contested these contacts and their competitive importance.[371] The document shows, nevertheless that, while it was eventually no surprise for [...] that the false information on rank came from [...] (because of […] presumed doings in the past, […]), [...] regarded the relations with […] counterparts, including TSST, as established and sufficiently reliable. […], this document shows parallel contacts between ODD suppliers as the ODD suppliers provided information not only on their own but also on the competitors' strategy.[372] Overall, this evidence points to the fact that cartel participants did not have an interest in lying given that information could have been verified by contacting others.[373] It also shows that the information exchanged was sensitive; the document reports competitors' internal information on their ranks for each of the three upcoming quarters (including for TSST), which together with the information on the prices of "[…]" having taken the first rank[…] were indicative of the price levels expected for the upcoming INs.

(201) HLDS, Lite-On and TSST exchanged information on their pricing intentions and results during the procurement in relation to HP's RFQs in February and March 2007[374]. Firstly, Lite-On and HLDS shared pricing, ranking intentions and other information, during and after the procurements.[375] In particular, […] of 5 February 2007 reads: […].[376] Secondly, […] dated […] show that, between the rounds and after the first RFQ, […] obtained from TSST prices quoted in the first, third and fourth round.[377] For example, […] dated[…], reads: "T [TSST] just said that they quoted only at $23.5 and lower. At the moment, because it was notified as the 1st place, it will have no more price-cut ([…] [TSST] said)".[378] Further, […] reports of […] and […] as well as of […] sent by […], discuss TSST's bidding and certain of these reports are also referring to contacts with TSST. […], these reports show that […] had contacts with […] (TSST) and certain other competitors on the occasion of the HP mPC's RFQ concerning prices, ranking and/or inventory. The reports show, for instance that […] had received information on TSST's price level before the first round of the bidding event that was launched on […] (report of[…]) and that on the March bidding event for instance before the 3rd round there was discussion between competitors on the rank and/or quote submitted (report of[…]: ″TSST says that they ranked 4th. Then, five suppliers may have to compete with each other during 3rd round.″). […].[379]

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370 ID […].

371 ID […][…].

372 ID […]; ID […]; ID […].

373 ID […]. This is consistent with […] submission that some of their employees would talk to every competitor before and after every auction round (see for example ID […] and that employees were relatively confident that competitors were telling them truth (see for example ID […]).

374 The eRFQs were organized by HP bPC and cPC for DVDRW between 5 and 9 February 2007, by HP mPC for slim DVDRW from 16 February 2007 (for April-May supplies) and by HP mPC for Slim ODDs in March 2007 (for June supplies).

375 ID […]; ID […]; ID […]; ID […].

376 ID […].

377 ID […].

378 ID […]; ID […]; ID […].

379 ID […]; ID […]; ID […]; ID […]. […] (ID […]), (ID […]; ID […]) […] (ID […]). See also ID […] .

(202) TSST has referred to the evidence on HP's February 2007 bidding events to show that ″Dell and HP were significant and regular source of competitor intelligence″.[380] TSST is […] that HP provided to it *[...]* for pricing at a critical moment or how to bid to stay in the race[381] and submits that HP's *[...]* played a key role in HLDS's successful bidding strategy. […].[382] […] . The fact that HP induced […] to lower its price (without giving details on competitors' prices) does not remove the fact that competitors, including TSST, had anticompetitive contacts, which is explicit from the contemporaneous evidence referred to in recital (201). In particular, already prior to the ″[…]″ from HP, following the 1st round […] (report of […]). On the same day of the contact with HP, […] report notes that […][383] set for […] the guidance under which it should not bid. The February 2007 events show that […] continued to observe that it would not go below, or too far, from TSST's price. Furthermore, the evidence also shows that the contacts between […] and TSST concerning the HP's RFQ continued even after 8 February 2007.[384] […] indeed got the […] ranking it was aiming at with the following prices: April […], May […] and June […] (with average of [.,..]). These final prices do not reflect the ″[…]″ of […], and the evidence therefore contradicts TSST's assertion that HP's guidance would have played *"key role"* in […] getting the ranking it wanted[385]. […].[386] All these companies were, however, lacking information on the cost advantage that HP would apply and therefore unexpectedly to all of them PLDS ranked 1st and TSST only 3rd.[387]

(203) Second reference to […] relates to the bidding event that started on 16 February 2007. Again in this instance […]it had been already prior to such guidance, and prior to start of the bidding, in contact with TSST to find out what TSST's bidding strategy would be and that it had been once more in contact with TSST before the 3rd and final round. […] TSST's price of USD 33, which it knew before the bidding started, was received from TSST.[388] Before the second bidding round […] during the second bidding round HP had responded to […] and that several ODD suppliers had quoted under USD 33 and that TSST had not quoted yet.[389] […].[390] Hence, although HP disclosed some information to the cartel participants, they nevertheless continued to engage in anticompetitive contacts and such disclosure does not deprive the contacts of their collusive nature.

(204) Exchanges continued in relation to RFQs organized by HP in May 2007. TSST has contested the May 2007 contacts.[391] Concerning the HP bPC&cPC's RFQ held on 11 May 2007 at 6 p.m. U.S. Pacific Daylight time (for July- September deliveries of DVDRW), […], because in the previous round PLDS accidentally ranked 1st, now TSST would like to get the 1st ranking whereas PLDS had a strategy to maintain the increased volume it achieved in the previous round. PLDS and HLDS were in

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380 ID […][…].
381 ID […].
382 ID […].
383 ID […].
384 ID […]. […].
385 ID […][…].
386 ID […].
387 ID […]; ID […].
388 ID […]; ID […].
389 ID […]; ID […].
390 ID […]; ID […].
391 ID […][…].

contact on 11 May 2007 regarding the results. The subsequent […].[392] In relation to HP mPC's RFQs in May 2007[393], […].[394] […] show pricing and quantity information of TSST (final price and the price after the first round).[395] In addition, the wording of the […] report ("[…]") indicates that […] was verifying competitors' pricing and had already received TSST's information.

(205) In the period June-August 2007 there were Dell INs for HH SATA DVD and HH DVDRW for August and September supplies and for 12.7 mm PATA Tray-Load slim DVDRW[396]. […] PLDS was in contact with HLDS regarding the ranking, volumes and/or pricing in the bidding process for HH SATA DVD/DVDRW IN.[397] It appears that TSST had already a 40% supply reserve for Dell. Dell had nevertheless requested TSST to further participate and the competitors were suspecting that Dell requested so to obtain lower prices for the rest of the supplies. […].[398]

(206) In July and August 2007, Sony Optiarc had its first anticompetitive contacts regarding pricing and/or supply information in relation to the Dell account. In particular, on 25 July 2007 [...] reported internally information received from […] and Sony Optiarc regarding Dell's HH SATA BD Combo as follows: *[...]*.[399] [...] mobile phone records also show contacts with […] (Sony Optiarc), most notably on 23 July 2007 a call of 19 minutes duration.[400] [...].[401] Sony/Optiarc argues that it never made sales of HH BD Combo to Dell. However, the evidence shows that Sony Optiarc was, despite eventually never being selected as ODD supplier, one of the potential ODD suppliers, next to PLDS and HLDS, to negotiate with Dell regarding supplies of ODDs that could potentially substitute the HH BD Combo originally supplied by PLDS.[402]

(207) Also on 17 August 2007 [...] reported […] about […] contacts with Sony Optiarc regarding slim DVDRW RFQ of Dell: […][403] This shows that […] received from Sony Optiarc its RFQ price for 12.7mm SATA Slot DVDRW for upcoming "Q1" and they also discussed TSST's pricing.

(208) HLDS, PLDS and TSST held numerous telephone contacts in August 2007 during and after HP bPC & cPC's RFQ[404] in order to exchange information on ranking, quoted prices and cost of quality.[405] Prior to this RFQ, on […] […]. The document shows how the price information that competitors shared at the previous auction impacted the approach in the new auction: "Since first round will be closed this week, we ask that the price to be adjusted to the price that […] bid at the previous

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392 ID […]; ID […]; ID […]; ID […]; ID […]; ID […]; ID […]. […] (ID […]) […].

393 Two HP mPC's RFQs took place in May: between 27 April and 5 May 2007 for Slim Combo (ID […]) and between 18 and 28 May for 12.7mm DVDRW (for period July to September 2007) (see e.g. ID […] and ID […].

394 ID […]; ID […].

395 ID […]; ID […].

396 ID […]; ID […]; ID […].

397 ID […]; ID […].

398 ID […]; ID […].

399 ID […]; ID […].

400 ID […].

401 ID […].

402 ID […].

403 ID […].

404 RFQ was organized by HP bPC & cPC between 7 and 17 August.

405 See for example ID […]; ID […].

auction. How about adjusting the price to what TSST showed at the 2nd round?"[406] Subsequently on […] […] […] circulated internally reports during this RFQ, prior to and after the 4th (final) round that was held on 17 August 2007. These reports contain 3rd and 4th round prices of TSST and […], including cost of quality factor. The […] report identifies TSST as source of information, as in response to [...]'s question "Is T company's price presumed or verified", […] confirms the following: "It was verified by T company. It doesn't look like that there is any need for T company to lie under current situation. If anything, their price would be lower, not higher."[407] […]. The available phone records also confirm these contacts. In particular the phone records of […] show calls with […] (TSST) both on […] and also an instant messaging between […] (HLDS) and […] (PLDS) is recorded in the file (see also recital (209)).[408] […]Similarly, the wording of […] report of 22 August 2007 confirms […] contacts with […] and TSST. This report, circulated in the context of HP's continuous pressure on the price after the procurement closed, contains the following: "*[...]*.[409] Therefore, given that the wording of the contemporaneous documents originating from both HLDS and PLDS sufficiently demonstrates the content of the discussions, TSST's argument that these documents are ambiguous or lack corroboration must be rejected.[410] […] internal e-mail discussion of 22 August 2007 also shows that HP approached all of PLDS, HLDS and TSST, and that with the confidence given by competitors that they will not change their bidding, […] also decided to maintain its position.[411] The pieces of evidence cited show that the cartel participants made judgements regarding the accuracy of the exchanged information in order to take it into account and had a relatively high degree of trust in it.

(209) Moreover, the record of instant messaging from […] between […] (HLDS) and […] (PLDS), […] for HP, not only shows that they shared pricing information and strategy for the next rounds but also that their knowledge was so precise that they were able to point out inaccurate information, provided by their interlocutor by mistake:

PLDS: *[...]*
HLDS:
PLDS:
HLDS: [412]
[...] [413]

(210) In September 2007 Dell was organising bidding for HH DVDRW, DVD-ROM, Combo and Slim ODDs. Sony/Optiarc contests the existence of competitor contacts.[414] However, contrary to Sony/Optiarc's arguments, the evidence shows that […] (HLDS) and […] (PLDS) discussed bidding strategy with each other as well as with Sony Optiarc prior to and after the Dell's IN in September 2007. [...] r […] [415]

406 ID […].
407 ID […]; ID[…].
408 ID […]; ID […] (phone records); ID […]; See also ID […] concerning the instant messaging […].
409 ID […]; ID […].
410 ID […][…].
411 ID […].
412 […]. ID […].
413 ID […]; ID […]; ID[…].
414 ID […][…].
415 ID […].

[...]'s phone records show a call with […] of Sony Optiarc on 17 September 2007. […] has also stated that […] may have spoken to […] about the Sony Optiarc information that appears in this document.[416] In addition, […] says in an […] report of 18 September 2007 that "[…]". In the same report […] circulates six items of Sony Optiarc's and […] October prices as competitors' IN price update. […] the fact that TSST's prices are not (yet) listed because *"*TSST hasn't yet got back from its Biz trip to Singapore without sharing their price*"*, which indicates that normally TSST would share the price information.[417] In addition to the exchanges of information on prices and bidding strategies before conclusion of the IN, […] reports, […], circulated after the event on 19 September 2007, show identical information on resulting prices and rankings for PLDS, HLDS, Sony Optiarc and TSST.[418] Sony/Optiarc has raised arguments about inaccuracy of the information and the undisclosed source of information.[419] However, Dell's bidding records confirm that four out of six of Sony Optiarc's pricing items were correctly reported by […]. In the two remaining cases the difference between the final price and the exchanged price was small (in the range from one to twenty five cents)[420]. Regarding Sony Optiarc, this shows clearly that anti-competitive discussions with competitors had taken place (as already demonstrated by the quote from the report of 18 September 2007 showing that before conclusion of the IN the competitors discussed on their intentions). Moreover, […]reports dated 20 September 2007 show that, when monitoring the prices after the event, competitors were disclosing the pricing information to each other ([...] notes that *"[...]"* and lists […] prices; another mail from […] shows that he expected to get the price information directly from competitors: *[...] [...]. [...].*")[421]. The […] report of 19 September 2007 also says explicitly that the customer was not sharing competitors' final prices.[422]

(211) As of October 2007, after Dell relocated its procurement team to Singapore, the majority of […] were also based in Singapore with HLDS, PLDS and Sony Optiarc appointing new […] (see recitals (82) and (83)). […]. All of them were based in Singapore as of October or November 2007.[423] […], they had regular bilateral meetings that took place once a month or every two months in restaurants or cafeterias. When they did not have time to meet in person, in particular when close to procurement events and in urgent situations, they would have phone calls instead, including during the procurement events and between rounds during the face-to-face negotiations with customers.[424] […].[425]

(212) On at least two occasions on 30 October 2007 and 13 December 2007, […] asked […] predecessor […] for help in order to check things with competitors. On 30 October 2007 […] asked […] to *"help to check with the other suppliers and see if they are telling the same story"* since "[…]*personally feel that [Dell] will be pushing*

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416 ID[…]; ID […]; ID […]. The phone records of […] show two calls with […] on 17 September […]: 6 minutes at 9:26 AM and 25 minutes at 1:24 PM.

417 ID […].

418 ID […]; ID […].

419 ID […][…].

420 ID […].

421 ID […].

422 ID […].

423 ID […]; ID […].

424 ID […]; ID […].

425 ID […].

all suppliers to move further down and it will not be such a good idea if [Sony Optiarc] also contribute to this price erosion".[426]

(213) HLDS, TSST and PLDS were in contact in relation to several RFQs conducted by the different divisions of HP in October 2007. TSST argues that the documents are ambiguous and that the different content and object of the exchanges between cartel participants is inconsistent with a finding of any common purpose.[427] The following quotes show that, contrary to TSST's claims, the anti-competitive exchanges are clearly demonstrated by the wording of the documents. […], prior to a RFQ for HH DVD-ROM, […] reported […].about exchanges of initial prices […]. as they were set to […] and […] by HP bPC:*[...]* ." This shows that competitors were comparing the information on initial prices that HP set to each of them and updating each other (*"T is trying to check the status"*). […].[428] […] email of […] shows how these exchanges between competitors concerning HP's communications of initial prices and their respective strategies resulted in limiting price competition, confirming the common purpose: *"Since there is no meaning of price competition in this auction, I will proceed by inputting the initial price just to show we participated in the auction"*.[429] Hence, contrary to TSST's claims regarding ambiguity of contemporaneous documents and lack of corroboration[430], the document itself is very clear and […]'s reports clearly identify TSST as the source of the pricing information for its competitors. TSST's identity is further confirmed by […].[431]

(214) Contacts involving TSST, HLDS and PLDS took place in relation to another RFQ conducted by HP mPC[432] also in October 2007. In relation to this RFQ, […].[433] On […] […] reported, prior to the fourth final round, results of the previous third round in the column entitled "estimated prices": "QSI *Under 28.8 TSST 28.9-28.8* [...] […]" as well as that "It is said that TSST, the 2nd runner, slightly broke the $29 at the 3rd round".[434] Contrary to TSST's claims about the ambiguity of contemporaneous documents or lack of corroboration[435], […] phone records further confirm […] contacts […] to exchange ranking or price ranges between the rounds.[436] Similarly, contrary to TSST's claims, […]'s report […], ("[…]") is also supported by […]'s phone call with […] (TSST) on […].[437] Contrary to TSST's claims[438], HLDS, TSST and PLDS exchanged information about their strategy and an upcoming RFQ of HP bPC for HH DVDRW held in November 2007. Contrary to TSST's claims about the ambiguity of contemporaneous documents and lack of corroboration, […] report of 31 October 2007 is explicit: "[…]". While the wording of […]'s report itself

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426 ID […].
427 ID […][…].
428 ID […]; ID […]; ID […].
429 ID […]; ID […].
430 ID […][…].
431 ID […].
432 HP mPC organized this RFQ (in four rounds) between 17 and 25 October 2007 for 12.7mm ODD for the supply period from December 2007 to February 2008.
433 ID […].
434 ID […], ID […]; ID […].
435 ID […][…].
436 ID […]; ID […].
437 ID […]; ID […].
438 ID […] disputing that different contents and objects disable to identify common purpose.

indicates that competitors, not HP, shared the information with […] ("[…]")[439], […].[440]

Year 2008

(215) The anticompetitive contacts between PLDS, HLDS, TSST and Sony Optiarc continued in 2008. Moreover, as of February 2008, Quanta also became involved in those contacts.

(216) A chain of Sony Optiarc emails from February 2008 shows that Sony Optiarc was in contact with TSST and PLDS in order to discuss their strategy in the upcoming Dell's reverse IN. […] (Sony Optiarc), […], reported internally on 14 February 2008, putting Quanta in copy (see Section 2.2.2), that "[customer's] Price Target for Slim DVDRW is $24.50~25.00 […] TSST mentioned that they will be price leader but they do not want 60% TAM as they have concern on supply […]". In relation to PLDS, the email reports that "[PLDS] mentioned that they will not be aggressive on price […]" and finally concludes that "Concern is that there might be a stalemate as no one would want to take 60% TAM".[441] An internal […] email sent by […] on the same day also refers to contacts with TSST and Sony Optiarc concerning this reverse IN.[442]

(217) Several days later, […] (Sony Optiarc) reported the results of the IN including the final bids and ranking of both TSST and PLDS internally, putting again Quanta in copy. The internal Sony Optiarc report shows that TSST and PLDS ranked first and second respectively and neither TSST nor PLDS reached the target price requested by Dell. The increased prices subsequently impacted also the prices requested by Dell from Sony Optiarc and HLDS in the subsequent offline negotiation, in which both undertakings were asked by Dell to match or to be lower than the second ranked bid of PLDS.[443]

(218) In relation to the bidding event referred to in recitals (216) and (217), Sony/Optiarc claims that it did not provide any information about its intended ranking. It also submits that the information received from its competitors was false and not subject to any agreement, as the outcome of the IN differed from the outcome discussed between the parties.[444] Moreover, Quanta claims that it did not participate in any contacts and that the circulated information was obtained from Dell and not from competitors.[445] A similar claim concerning a doubtful source of the information was also submitted by TSST.[446]

(219) In relation to Sony/Optiarc's claims, the evidence indeed does not indicate whether Sony Optiarc disclosed its intended ranking to its competitors. The evidence, however, explicitly shows that Sony Optiarc obtained information from both TSST and PLDS concerning their intended bidding strategies. This information enabled Sony Optiarc to adjust its own pricing by taking into account the sensitive

439 ID […].
440 ID […]; ID […].
441 ID […].
442 ID […].
443 ID […], ID […].
444 ID […][…].
445 ID […][…].
446 ID […][…].

information shared by both undertakings. Moreover, contrary to Sony/Optiarc's arguments, it is not true that the information shared by both undertakings was false. According to the internal Sony Optiarc email referred to in recital (216), both TSST and PLDS confirmed to Sony Optiarc that they would not bid aggressively and might therefore even accept a lower ranking than the one communicated to Sony Optiarc during the contact. Although TSST and PLDS finally ranked first and second, they indeed did not bid aggressively and the final winning bid of TSST was higher than the intended target price of Dell.[447]In addition, an internal […] email sent by […] on 14 February 2008 shows that Sony Optiarc was not purely passively receiving information from its competitors, but it also disclosed certain details of its bidding strategy to its competitors. The relevant part […] reads: "*Optiarc stated that they need volume to recover investment as their drive was RTS in Q3FY08 but was sure not to meet the starting price of $23.50.*"[448] Contrary to Quanta's and TSST's arguments, the wording of the Sony Optiarc email clearly shows that the information was obtained from its competitors "[…] TSST mentioned that they will be price leader […] [PLDS] mentioned that they will not be aggressive on price […]".[449][…].[450] The fact that Quanta was not directly involved in the contacts with competitors is not relevant, as Quanta did not raise any objections to being copied in the email. Moreover, the Commission notes that Quanta itself got actively involved in the anticompetitive contacts later in the year (see in particular recitals (225) and (249)).

(220) Sony/Optiarc claims in relation to an internal […] email sent by […] on 28 February 2008[451] that the information shared by Sony Optiarc was not individualised data regarding pricing or quantity and it had only little effect on competition.[452] Contrary to Sony/Optiarc's arguments, the wording of the email clearly indicates that the information obtained from Sony Optiarc[…] [453] was capable of impacting […] pricing decisions. It is also evident that it filled in the picture of the competition landscape provided also by other ODD suppliers to PLDS in relation to Dell's Slim DVDRW and Combo. The relevance of the information provided by Sony Optiarc is emphasized by the fact that […] circulated it internally together with the (more precise) information from TSST and HLDS. Moreover, the individual pieces of evidence should not be read in isolation without keeping in mind the whole body of evidence used for (i) establishing the existence of the infringement and (ii) establishing the individual liability of an undertaking for its participation in the infringement. It is evident that this particular contact was part of a number of contacts between Sony Optiarc and its competitors.

(221) On 1 April 2008, […] reported to […] management price information obtained from TSST. This information covered TSST's Q2 prices for Dell's Slim Tray DVDRW. The email reads […] replied that […].[454]An internal […] email dated 4 April 2008

447 ID […].
448 ID […].
449 ID […].
450 ID […].
451 ID […].
452 ID […][…].
453 ID […].
454 ID […]; ID […].

shows that […] finally received the confirmation of TSST's price from […] together with details of […] pricing and bidding strategy.[455]

(222) An internal […] email sent by […] on 4 April 2008 reports on pull information for Dell's Slim Slot PATA DVDRW of different undertakings including Sony Optiarc. Sony/Optiarc claims that the pull information shared by Sony Optiarc was past data and PLDS knew that the information was likely false. Sony/Optiarc therefore concludes that the information did not have any anticompetitive object or effect.[456] Contrary to Sony/Optiarc's arguments, the fact that the email covered past information does not deprive it of significance for PLDS.[457] As already mentioned in Section 4.6.2.2, information on pull status provided an accurate view about ODD suppliers' actual available production volumes and supply capacity as well as perfected information on awarded volumes. It enabled the parties to better estimate the bidding strategies and intentions of their competitors in the upcoming RFQs. The fact that the information exchanged was not entirely accurate does not deprive the sharing of confidential information of its anticompetitive nature. Moreover, nothing in the email indicates that Sony Optiarc intended to enable PLDS to understand that the information is inaccurate. On the contrary, PLDS understood that the information was inaccurate only thanks to the pull statuses also from other competitors.

(223) HLDS, TSST, PLDS and Quanta participated in numerous additional anticompetitive contacts that took place in April 2008 prior to and during HP mPC's RFQ. In relation to this eRFQ, there is evidence that HLDS, PLDS TSST and Quanta shared information concerning their bidding strategy. Specifically, […] sent an internal email on […] concerning "verified information from […] competitors […]". The email contained targeted ranking and pricing strategy in the upcoming HP mPC's RFQ of both competitors. On the basis of the information received from competitors, the email concludes: "*There is high possibility of limited price competition for PATA drives while having strong price competition for SATA drives*".[458] The evidence shows that a similar type of information concerning the bidding strategy was also shared between PLDS and HLDS on several occasions in the framework of this RFQ.[459]

(224) An internal […] email sent by […] on […] refers to a further discussion with TSST concerning the HP mPC Slim SATA DVDRW RFQ and mentions amongst other: "*T* has shown their intention not to adjust their price any more from their 1st price. […] According to T*, T* will break a little bit […]*".[460]

(225) Finally, there is evidence that […] also exchanged pricing information with Quanta in relation to the same RFQ.[461] […] reported in an internal […] email dated 10 April 2008:[…] [462] Two internal […] reports from April 2008 indicate that […] quoted its price to HP based on the price information received from Quanta.[463]

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455 ID […].
456 ID […][…].
457 ID […].
458 ID […].
459 ID […]; ID […]; ID […].
460 ID […].
461 ID […]; ID […].
462 ID […].
463 ID […], ID […].

(226) According to Quanta, the contacts took place only after the procurement events and they do not contain any information that could affect competition in the subsequent bids. In relation to the […] email of 10 April 2008, Quanta states that it is not aware of any contacts with […] and that the source of the information is therefore not clear.[464]

(227) Contrary to Quanta's arguments, the evidence shows that the procurement was still ongoing at the time when the emails were sent and that the information exchanged between competitors was therefore highly relevant. This is confirmed by the wording of the internal […] emails of 10 April 2008 which state amongst other[…].[465] It is true that the HP email referred to by Quanta[466] indicates that a certain procurement event might have been already closed, but this concerned HP's mPC Slim PATA DVDRW procurement and not the mPC Slim SATA DVDRW that was discussed by Quanta and […]. Moreover, the fact that Quanta does not have any record of any contact with […] is irrelevant, as the wording of the […] internal email clearly shows that the source of the information was Quanta[…].[467]

(228) PLDS and HLDS coordinated their bidding strategy in relation to HP's eRFQ for half-height ODDs. An internal […] email sent by […] on 24 April 2008 reports on the results of the discussions. HLDS disclosed to PLDS its bidding strategy in the upcoming RFQ including the targeted ranking and pricing. According to the email, […] further stated that "[…].[468]

(229) In relation to information covering Sony Optiarc circulated in an internal […] email chain sent between 23 and 30 April 2008, Sony/Optiarc argues that the information came from Dell and was not anyway competitively significant or capable of enabling coordination.[469] The evidence shows that the information concerning Sony Optiarc contained in the […] email sent on 23 April 2008[470] came indeed from Dell, however it also indicates that […] wanted to confirm the information with Sony Optiarc ("*TBC*"). This is also confirmed by the wording of the follow-up […] email sent one week later[471] showing that the information contained in this email came directly from Sony Optiarc. […] refers in this email to[…], which indicates that the source of the information was Sony Optiarc. This is confirmed by another internal […] email sent by […] on 27 May 2008, in which […] uses similar wording and reports about[…]. The content of this email shows that the source of the information was TSST and not Dell.[472] Moreover, it is not true that the information shared with […] was not competitively significant or capable of enabling coordination. On the contrary, by disclosing the fact that Sony Optiarc[…][473], Sony Optiarc gave […] a clear indication that it would not be too aggressive in the upcoming bids due to the lack of the necessary capacity.

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464 ID […][…].
465 ID […].
466 ID […][…].
467 ID […].
468 ID […].
469 ID […][…].
470 ID […].
471 ID […].
472 ID […].
473 ID […].

(230) The contacts between […] of PLDS and HLDS concerning HP's eRFQ for half-height ODDs further continued at the beginning of May. […] wrote in an internal email dated 5 May 2008 in this regard: *[...]*".[474] In a subsequent internal […] report sent by on 6 May 2008 before the first round, […] informs: *[...]*".[475] Following the adjustment of the volume allocation rule by HP, the ranking of the undertakings in the RFQ became less important. Both HLDS and PLDS therefore agreed to bid roughly similar prices. This agreement is confirmed by an internal […] email which states in relation to the final price offer submitted to HP amongst other: *"[we] inputted $[...] pursuant to the agreement by both companies*."[476]

(231) […] and TSST also exchanged their bidding intentions in relation to HP's eRFQ for half-height ODDs. In an internal […] email dated 6 May 2008, […] reports on the "current atmosphere among the competitors [[…] and TSST]". The email displays TSST's bidding intentions as communicated to […]by […] (TSST) and says amongst other: "*it is true that there will be a loss at this HH DVDRW C/S, but in order to maintain the current volume, it [TSST] must take the first place*."[477]

(232) In May 2008, […] exchanged information with both […] and TSST about their pricing strategy in Dell's IN for SATA Slim Tray DVDRW. An internal report concerning […] prices sent on 15 May 2008 reads: *[...]*"[478] The subsequent internal report concerning TSST sent on 27 May 2008 mentions "*For SATA Slim Tray DVDRW, the instruction is to get 1st place regardless of pricing. Lets watch and see.*"[479]

(233) […] at HLDS, TSST, PLDS and Sony Optiarc organised telephone contacts at the beginning of June 2008 in relation Dell's IN for August and September prices of HH DVDRW and HH DVD-ROM. The […] at both HLDS and PLDS reported each to their management on past (July) prices of their competitors as well as on other information exchanged with competitors such as their bidding intentions. […]: "[…]".[480] An internal […] report sent by […] on the same day reads amongst other:

[…][481]

(234) Sony/Optiarc claims in relation to Dell's IN of June 2008 that […] (Sony Optiarc) gave to PLDS only a broad price indication, which covered past prices. Moreover, according to Sony/Optiarc, the results of the IN were inconsistent with the existence of any agreement or understanding and the competition was vigorous despite Sony Optiarc's alleged statement concerning its bidding strategy.[482]

(235) The internal […] email of 2 June 2008 shows that Sony Optiarc disclosed its intended price of USD 18.88 for the DVDRW bid as well as its intended ranking (rank 3 or even 2) to […]. This clearly contradicts Sony/Optiarc's claim that it provided only a broad price indication to […]. As to Sony/Optiarc's argument that it shared only past prices with […], the evidence shows the contrary. The internal […]

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474 ID […]; ID […]; ID […].
475 ID […]; ID […].
476 ID […]; ID […].
477 ID […]; ID […].
478 ID […]; ID […].
479 ID […].
480 ID […]; ID […]; ID […].
481 ID […].
482 ID […][…]ID […][…].

email referred to by Sony/Optiarc in its reply mentions in relation to the HH DVDRW RFQ that the prices of TSST for this product were not available ("*N.A.*") and not that they had been already quoted to Dell.[483] Moreover, the evidence also shows that the bidding process for the DVDRW bid started only on 5 June 2008, while the […] email of 2 June 2008 already included the pricing intentions of the competitors (Q3 RFQ price column refers to the price for the months of August/September, for which the IN was organised by Dell).[484]

(236) As to Sony/Optiarc's argument regarding the non-existence of an agreement on the ranking/pricing for this bid, it is true that no formal agreement was concluded between the parties and that Sony Optiarc therefore did not reach the desired ranking. On the other hand, Sony Optiarc's disclosure of its confidential pricing information, which was effectively used by […], shows a collusive behaviour. As […] knew that Sony Optiarc's intended price was USD 18.88, […] ranked third by submitting a price, which was exactly USD 0.01 lower than the price of Sony Optiarc.[485]

(237) PLDS, HLDS, Sony Optiarc and TSST exchanged price information at least from 20 June to 11 July 2008 in relation to bilateral negotiations organized by Dell for the supplies for HH DVDRW in October 2008. This is documented by several pieces of evidence. An internal […] report concerning the on-going competition sent by […] on 20 June 2008 reads: "[…].[486] Another internal […] report with updated price information was sent again by […] on 25 June 2008. It mentions amongst other:*[…]*.[487]

(238) Sony/Optiarc claims that the internal […] email sent by […] on 20 June 2008 does not reflect any contact between Sony Optiarc and […]. Moreover, Sony/Optiarc submits that the email of 25 June 2008 does not establish any coordination among ODD suppliers or any anticompetitive object or effect.[488]

(239) The[…] internal email sent by […] on 20 June 2008 does show a contact between Sony Optiarc and [...]. When describing the individual quotes of […]' competitors, the email refers to[…][489]. This clearly shows that the information was obtained from Sony Optiarc itself and not from Dell. Further confirmation can be found in the following parts of the email, which refer to additional types of ODDs and contain further information that came from Sony Optiarc.[490] Moreover, the contact with Sony Optiarc is also confirmed by […], which confirms that the pricing information mentioned in the internal […] email came from competitors and further states that Sony Optiarc also shared with […] certain information concerning […]' pricing.[491]

(240) As to Sony/Optiarc's claim that the internal […] email dated 25 June 2008 does not establish any coordination among ODD suppliers or any anticompetitive object or effect, it has to be stressed that this email has to be read in connection with the previous exchange of prices as reflected in the internal […] email of 20 June 2008.

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483 ID […].
484 ID […].
485 ID […].
486 ID […]; ID […].
487 ID […].
488 ID […][…].
489 ID […].
490 ID […]:*[…]*[…].
491 ID […].

The email of 25 June 2008 served as a follow-up to this email, by which […] monitored the outcome of the bid. Moreover, the information on past prices and rankings in the bid played an essential role for the parties, as it enabled them to better estimate the bidding strategies of their competitors in the upcoming bids as well as the starting prices in the next bids (for more information, see Section 4.6.2.1). Finally, nothing indicates that the email would have been inaccurate. The email clearly says that Sony Optiarc in the end quoted a price of USD 18.73, which Sony/Optiarc also confirms in its reply to the SO.[492]

(241) The anticompetitive object of the contact between […] and Sony Optiarc is also confirmed by Sony/Optiarc itself. Sony/Optiarc stated that […] informed […] (Sony Optiarc) of the first price proposal that […] had communicated to Dell in anticipation of that IN. Moreover, […] recalls that he provided […] with an indication of a price range of Sony Optiarc's first price proposal in relation to the RFQ concerned.[493]

(242) An internal […] email chain dated 2 July 2008 refers to contacts between each PLDS and HLDS and […] and Quanta respectively in relation to mPC HP's Slim ODD eRFQ. […] reported about […] discussion with […] regarding its intended bidding plan and pricing. According to the email, […] stated that:. *[...]*" Moreover, in a subsequent email later that day, […] further stated in relation to […] contact with Quanta concerning its price that:[…][494]

(243) In an internal […] email dated[…], […], communicated information from TSST's […] concerning HP's initial price for e-auction. The email says amongst other "*It is said that after T* has rejected a 1% Deduction, T* has proposed that they start with a 1% Deduct from 3Q's Average Price. […]they say that #1 is their target.*" The email further contains information about PLDS' strategy in the e-auction.[495]

(244) […] and TSST had numerous telephone contacts in relation to HP's HH DVD-ROM eRFQs conducted by HP around 20 August 2008.[496] The account managers at […] and TSST rigged their bids by providing each other concrete commitments in terms of ranking and/or price. […] reported internally on 16 August 2008 that […].[497] […] followed up on this internal report on 18 August 2008 when replying to an email of […] who questioned the non-aggressiveness of TSST in the upcoming bid. In […] reply, […] wrote amongst other:[…][498]

(245) TSST claims that the contacts with […] in August 2008 did not include any commitment or agreement between […] and TSST. It further adds that […] described these contacts as general communication.[499]

(246) Contrary to TSST's arguments, the evidence shows that the contacts between both parties cannot be described as purely general communication. For […], it was of great importance to know how aggressive its competitors would be in the upcoming eRFQs. The knowledge of competitors' bidding intentions enabled it to adjust its own

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492 ID […], ID […][…].
493 ID […].
494 ID […].
495 ID […]; ID […]
496 ID […]; ID […]; ID […]; ID […].
497 ID […].
498 ID […].
499 ID […][…].

bidding strategy accordingly. […]. The importance of the information exchange is also confirmed by […], to which TSST referred in its reply. […] both parties (meaning TSST and […) respected the status quo on the market for HP's HH DVD-ROMs and that there was therefore no need to fight hard for the first place.[500] This clearly shows the existence of an understanding between both parties concerning the allocation of the market.

(247) […].[501] […].[502]

(248) Numerous contacts took place in October 2008 among […] at HLDS, TSST, PLDS and Quanta in relation to two HP's eRFQs - mainstream and OPP.

(249) As for the mainstream RFQ, the evidence shows that HLDS, TSST, PLDS and Quanta exchanged pricing information concerning this RFQ. An internal Quanta email sent by […] on 20 October 2008 reports internally about a meeting with HLDS: "*Last week I met HLDS guy. According to what he said, their best price is around 24,65 eventually. However, they won't go that far in the 1st round as well and might provide a higher price […]*."[503] Accordingly, Quanta contemplated to propose the price ranging between USD 24.70 and 24.75.[504] In an internal […] email sent on[…], […] reports on TSST's price information received from TSST following the first round of the RFQ. The email reads: "*It seems that T offered 24.64 USD, but T's information is hard to trust. However, because T says that it came in 2nd, it seems that there is not much difference with the current price*."[505] An internal […] email sent by […] on 24 October 2008 reports on his discussion with HLDS and says: *[…]*"[506]

(250) As for the OPP RFQ, the evidence shows that similar pricing discussions were held between PLDS, TSST, HLDS and Quanta. An internal report of […] (Quanta) sent on 24 October 2008, reads "*In order to protect the price in certain level, suppliers have the consensus to keep the price no lower than USD 24.25*"[507]

(251) The contacts between HLDS, PLDS, Quanta and TSST are further confirmed by an internal […] email sent by […] on the same day, in which […] provides information received from individual competitors. The email mentions amongst other:[…][508]

(252) In addition, […] (HLDS) agreed with […] (PLDS) that it would not quote below the price of […].[…] was later unable to honour this agreement due to pressure exerted by HP and he informed his counterpart at […] about it in a meeting. […] therefore in the end quoted a price lower by USD 0.10 thus obtaining a share of 30%.[509]

(253) An […] email sent by […] on […] shows the existence of continuous contacts between competitors with the ultimate aim of confirming the reliability of information received from HP in relation to this eRFQ. In this email, […] reported

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501 ID […]; ID […]; ID […].
502 ID […].
503 ID […].
504 ID […].
505 ID […].
506 ID […].
507 ID […].
508 ID […]; ID […]; ID […]; ID […].
509 ID […]; ID […]; ID […].

that according to HP "*1st ranking company's price is under 24.00. There is no way how to confirm this price, it seems that all the other competitors are hearing the same thing*".[510]

(254) In relation to HP's mainstream RFQ, Quanta claims that the discussions between […] (Quanta) and […] ([…]) did not influence Quanta's decision-making process in determining the price to bid. In relation to the OPP RFQ, Quanta submits that the information was received from HP.[511] TSST claims that the evidence demonstrates that it refused requests from other ODD suppliers to maintain its price level. According to TSST, TSST was therefore not involved in any agreement and it did not disclose its intentions for the OPP negotiations.[512]

(255) Contrary to Quanta's arguments concerning the mainstream RFQ, it is irrelevant, whether the contacts between Quanta and […] influenced Quanta's decision making. The mere fact that the pricing information received from […] was worth mentioning in the internal Quanta email of 20 October 2008 indicates that the information was not insignificant for Quanta. As for the OPP RFQ, nothing in the email indicates that the information came from HP, on the contrary, its content actually contradicts this claim. The email clearly shows that HP's price target was USD 24 while the consensus among the competitors was to keep the price above USD 24.25 ("*In order to protect the price in certain level, suppliers have the consensus to keep the price no lower than* USD 24.25"[513]). Contrary to Quanta's arguments, there is no plausible explanation, why HP would have been trying to spread this type of information among its ODD suppliers, as this type of information would only worsen its position in the on-going price negotiations.

(256) As for the claims submitted by TSST, the internal Quanta email dated 24 October 2008 confirms the existence of, at least initial, understanding between the competitors concerning the prices to be submitted.[514] Moreover, the existence of contacts between TSST and its competitors is also confirmed by an internal […] sent on the same day. This email confirms that TSST shared with […] its pricing prospects as well as its bidding strategy. The fact that the internal […] email explicitly mentions that TSST wanted a free competition goes hand in hand with the fact that TSST shared its strategy to fight for maximum volume in this RFQ.[515]

(257) HLDS, PLDS and Sony Optiarc exchanged information prior to Dell's IN on 30 October 2008, including their bidding strategies. On 28 October 2008 […], Sony Optiarc, circulated internally the prices of Sony Optiarc's competitors from the past IN. The email sent further stated:[…]. Quanta was copied on this e-mail.[516], […] circulated […]an email with information obtained from Sony Optiarc concerning its bidding intentions. The email states amongst other:.[…] [517] Moreover, […].[518]

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510 ID […].
511 ID […][…].
512 ID […][…].
513 ID […].
514 ID […].
515 ID […].
516 ID […].
517 ID […].
518 ID […].

(258) Sony/Optiarc claims that the pricing information circulated in the […]'s email of 28 October 2008 was uncertain and inaccurate. Moreover, Sony/Optiarc also says that even if the information concerning the future price of PLDS were accurate, it would not be capable of reducing Sony Optiarc's uncertainty, as the email did not report about PLDS' aggressiveness or intended final pricing in the upcoming IN. Similar claims concerning the on-going uncertainty were also raised in relation to the email sent by […].[519] In relation to the […] email of 28 October 2008, Quanta claims that the source of the information is not evident (information provided by Dell combined with […]'s speculations) and that Quanta was anyway not involved in any anticompetitive contacts.[520]

(259) The evidence clearly shows that the parties exchanged sensitive information, which had a direct link to the upcoming IN. While information shared with the competitors may not have been always accurate, this was not known to the recipient of the information. Moreover, the discrepancies raised by Sony/Optiarc were not of an essential nature. As to the claim concerning the on-going uncertainty regarding the future conduct in the bid, although the exchanged information did not always give a full picture about the planned bidding strategy of the parties, this does not change the anticompetitive nature of the contacts. Furthermore, the information concerning Sony Optiarc circulated internally within […] by […] one day before the IN demonstrates that […] fully understood that it did not have to be afraid of any fierce competition from Sony Optiarc in the upcoming RFQ ("*[...] They plan to participate in 12.7mm Tray/Slot DVD-W only but no aggressive price adjustment is expected. In slot's case, Dec price is $31.69, they still have $0.30 price gap compared to […]. They mentioned it seems hard to chase our price at once. […] In tray's case, Dec price is $24.25. It's already a low price compared to original Q4 target price $25 and so it seems hard to make any additional price adjustments. […]")*[521]. As to the claims of Quanta, it is evident from the content of […] email of 28 October 2008[522] that the source of the information must have been, at least to a certain extent, Quanta's competitors (a contact with at least […] is confirmed by an internal […] email sent by […] ([…]) on[…]: "*They [Sony Optiarc] mentioned that it seems hard to chase our price at once."*)[523]. As to the price of PLDS mentioned in the email, it is highly unlikely that Dell was aware of that price as PLDS launched a new model[524]. As a consequence, PLDS' price did not correspond to its final price from the last RFQ. Moreover, even if Dell had been aware of PLDS' intended pricing, it would not have shared such commercially sensitive information with other ODD suppliers because that would only have been to its own disadvantage and contrary to its established non-disclosure policy (see recital (313)). […].[525] Quanta's claim that it was not directly involved in the contacts with competitors is not relevant, as Quanta did not raise any objections to being copied in the email. Moreover, the Commission notes that Quanta was actively involved in other anticompetitive contacts during 2008 and

519 ID […][…].
520 ID […][…].
521 ID […].
522 ID […].
523 ID […].
524 ID […].
525 ID […].

receiving this information was a mere continuation of these contacts (see in particular recitals (225) and (249)).

(260) HLDS and PLDS rigged their bids in two events of HP in November 2008. […].[526] They further discussed their approach in bilateral negotiations with HP for BD Combo. […].[527]

(261) […].[528] […].[529] […].[530] […].[531]

(262) TSST claims that the Commission did not establish any agreement involving TSST. Moreover, it further submits that both the […] are incorrect, as the TSST's actual price differed from the price communicated by […]. This apparently shows that […] made up the price information in order to bid a lower price. Finally, the existence of any agreement is, according to TSST, further contradicted by the timeline of the "supposed" agreement.[532]

(263) Contrary to TSST's claims, […].[533] Any additional price reduction (without any desire to fight for the first rank) would therefore just diminish PLDS' profits and would be thus against PLDS' commercial interests. In any event, even if TSST's actual prices did not correspond to the exchanges of price intentions, it would not diminish the anti-competitive nature of those exchanges in relation to a future RFQ[534]. […].[535] Moreover, contrary to TSST's claims, there is no discrepancy in the timeline of the events. […].[536]

(264) This concludes the chronological description of the anticompetitive contacts among the ODD suppliers. The description in this Section as well as the additional anticompetitive contacts […] demonstrate that the ODD suppliers created a dense network of anticompetitive contacts that stretched over an extensive period of time. In the framework of these contacts, the ODD suppliers discussed various sensitive issues relating to the status of the ODD business and coordinated their behaviour, including the bidding strategies, in relation to the procurement of ODDs by Dell and HP.

5. APPLICATION OF ARTICLE 101 OF THE TFEU AND ARTICLE 53 OF THE EEA AGREEMENT

(265) The Commission notes that by virtue of the accession of Bulgaria and Romania on 1 January 2007, Article 101(1) of the TFEU applies to the cartel concerning those Member States.

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526 ID […]
527 ID […]; ID […].
528 ID […]; ID […]; ID […].
529 ID […].
530 ID […].
531 ID […].
532 ID […][…].
533 ID […]. […] both parties agreed to lower the price by […] and the ranking thus remained the same.
534 Case T-655/11, *FSL and Others v Commission*, ECLI:EU:T:2015:383, paragraph 328.
535 ID […].
536 ID […].

5.1. Relationship between the TFEU and the EEA Agreement

(266) The cartel described in this Decision (see Section 4 and […]) covered […]the entire territory of the EEA (European Union together with Norway, Liechtenstein and Iceland). The cartel was therefore liable to affect competition in the whole of the internal market and the territory covered by the EEA Agreement.

(267) Insofar as the arrangements affected competition in the internal market and trade between Member States of the European Union, Article 101 of the TFEU is applicable. Article 53 of the EEA Agreement is applicable insofar as the arrangements affected competition in the territory covered by that Agreement and trade between the Contracting Parties to that Agreement.

5.2. Jurisdiction

(268) In this case, the Commission is the competent authority to apply both Article 101 of the TFEU and Article 53 of the EEA Agreement on the basis of Article 56 of the EEA Agreement, since the cartel had an appreciable effect on trade between Member States (see Section 5.4.5). This is notwithstanding the fact that some of the addressees of the Decision are based outside the EEA and formed their agreements and/or concerted practices outside the EEA.

(269) As the Court of Justice set out in the *Wood Pulp* case, an infringement of Article 101 of the TFEU "*consists of conduct made up of two elements, the formation of the agreement, decision or concerted practice and the implementation thereof. If the applicability of the prohibitions laid down under competition law were made to depend on the place where the agreement, decision or concerted practice was formed, the result would obviously be to give undertakings an easy means of evading those prohibitions. The decisive factor is therefore the place where it is implemented.*"[537] Thus, the place of formation of the anti-competitive conduct is irrelevant for the Commission's territorial jurisdiction and the focus is on the place of its implementation. Furthermore, in the *Gencor* case, the General Court confirmed that "*According to Wood pulp, the criterion as to the implementation of an agreement is satisfied by mere sale within the Community, irrespective of the location of the sources of supply and the production plant*".[538]

(270) In this case, the cartel covered behaviour implemented […]in the EEA. More specifically, the ODD suppliers involved in the cartel, although based outside the EEA, have been engaging in a competition to win ODD supply orders from HP and Dell […]in the EEA. After the global bidding process, part of the ODDs have been sold to the EEA-based entities of HP and Dell which have been invoiced for them (see Section 8.3.1 and Table 2 in Section 8.3.3) .[539] This demonstrates that the cartel was implemented in the EEA by all undertakings addressed by this Decision.

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537 Judgment of the Court of Justice of 27 September 1988, *Ahlström and others v Commission* ("Wood Pulp"), 89/85, 104/85, 114/85, 116/85, 117/85, 125/85, 126/85, 127/85, 128/85 and 129/85, ECLI:EU:C:1988:447, paragraphs 16 and 17.

538 Judgment of the General Court of 25 March 1999, *Gencor v Commission*, T-102/96, ECLI:EU:T:1999:65, paragraph 87.

539 See ID […] and ID […], […].

5.2.1. Arguments of the parties and assessment thereof by the Commission

(271) TSST submits[540] that the Commission has not established its external jurisdiction to investigate conduct relating to sales of ODD products delivered outside the EEA. It argues that, in particular, the Commission has not demonstrated that (i) the said conduct was implemented within the EEA, or (ii) it had an immediate, foreseeable and substantial effect on competition within the EEA.

(272) More specifically, TSST submits[541] that the Commission has not proven its jurisdiction over cartel conduct relating to HP notebooks (namely ODDs used in HP notebooks, hereinafter "HP notebook conduct"). It argues that such conduct took place outside the EEA between ODD suppliers located outside the EEA, concerns sales of products delivered outside the EEA to a customer (here HP) whose headquarters are also outside the EEA and that these sales are based on procurement events that also occurred outside the EEA. Quanta makes a similar claim[542], extending it seemingly to the totality of the behaviour subject to this Decision, without limiting it to the HP notebook conduct. In this context Quanta also pointed out that in the ODD industry purchase decisions are commonly taken centrally at the respective customer's purchasing department. Furthermore, TSST argues[543] that ODD suppliers had no control over incorporation of the ODDs into final products nor over the delivery location of their ODD products/HP's final products.

(273) TSST[544] and Quanta[545] submit that, as a result the Commission cannot satisfy the *Wood Pulp* [546] implementation test and that, therefore, there is insufficient connection of the HP notebook conduct (according to TSST) or the conduct overall (according to Quanta) with the territory of the EEA. Quanta maintains that in *Wood Pulp*, unlike in this case, Community customers accounted for two thirds of the total sales of the participants and there was ample evidence of coordination of prices charged to specific Community customers. TSST submits with respect to the place of the competition between cartel members, that HP introduced procurement procedures that were conducted on-line and off-line, with no nexus with the EEA. TSST also states with reference to the *Wood Pulp* ruling that competition takes place within the EEA only when the cartel members sell directly to customers located within the EEA. Hence, according to TSST there is no factual or legal basis for the Commission to assert that competition for notebook ODD supplies to HP (to be delivered at locations outside the EEA) should be deemed to take place within the EEA.

(274) As explained in recitals (268)-(270), the Commission has jurisdiction in this case because the parties implemented their cartel behaviour in the EEA. The procurement was done centrally by global procurement teams of Dell and HP in charge of selecting the ODD suppliers and negotiating prices for all ODD supplies, including

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540 ID […][…].
541 ID […][…].
542 ID […][…].
543 ID […][…].

544 ID […][…].
545 ID […][…].
546 Judgment of the Court of Justice of 27 September 1988, *Ahlström and others v Commission* ("Wood Pulp"), 89/85, 104/85, 114/85, 116/85, 117/85, 125/85, 126/85, 127/85, 128/85 and 129/85, ECLI:EU:C:1988:447.

for those destined for the EEA[547]. Furthermore, these customers used predominantly virtual internet environment as a procurement platform[548]. EEA-based Dell and HP entities purchased the ODDs at the globally determined prices and were invoiced for those purchases.[549] As the Commission's jurisdiction is based on sales invoiced to Dell and HP in the EEA, there is no need to rebut the parties' arguments in so far as they relate to sales or deliveries of ODDs outside of the EEA or of ODDs incorporated into final products.

(275) The virtual environment used in the ODD procurement procedures, location of the ODD suppliers' and customers' employees involved in the procurement and location of third party original design manufacturers ("ODM")[550] merely show the global character of the competitive process involving ODD supply. However, these aspects, which have no objective link to the cartel conduct or to the cartelists are not relevant to determine the jurisdiction of the Commission to apply Article 101(1) of the TFEU.

(276) As rightly pointed out by the parties and maintained by the Commission, in line with the *Wood Pulp* case, the decisive criterion in establishing the Commission's jurisdiction is the implementation of the cartel conduct and not the formation of the agreement, decision or concerted practice.[551]

(277) It is evident that in this case the ODD cartel covered behaviour implemented […] including in the EEA. The cartelists, although based outside the EEA, have been engaging in a competition to win ODD supply orders from HP and Dell […] also in the EEA. After the global bidding process, part of the ODDs have been sold to the EEA-based entities of HP and Dell which have been invoiced for them.

(278) In light of the recitals (274)-(277) arguments of the parties invoking lack of jurisdiction over the conduct investigated by the Commission must be dismissed.

(279) TSST also submits that the HP notebook conduct fails to satisfy the effects test set out in the *Gencor* case[552]. It argues that such test alone has no support in Union jurisprudence for a case like the present one.[553] Quanta[554] raises a similar claim, submitting that in the absence of a direct territorial link (which it seems to argue to apply for the whole conduct subject to this case), the Commission has to satisfy the *Gencor* criteria of "*immediate, substantial and foreseeable effect in the EEA*" of the conduct concerned by this Decision.

(280) As set out in recital (269), the Commission bases its jurisdiction to apply Article 101 of the TFEU on the implementation doctrine as established in the *Wood Pulp I*

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547 See ID […] and ID […], sent to the parties by Letter of Facts of 3 June 2015.

548 Regarding HP, […] (ID […]) With respect to procurement methods employed by Dell, […] (ID […]).

549 See ID […] and ID […], sent to the parties by Letter of Facts of 3 June 2015.

550 ODM were designated by the customers in some instances to assemble appliances (including by incorporating the ODD into the final product). Production facilities of the ODM were located in and outside of the EEA.

551 Judgment of the Court of Justice of 27 September 1988, *Ahlström and others v Commission* ("Wood Pulp"), 89/85, 104/85, 114/85, 116/85, 117/85, 125/85, 126/85, 127/85, 128/85 and 129/85, ECLI:EU:C:1988:447, paragraphs 16 and 17.

552 Judgment of the General Court of 25 March 1999, *Gencor v Commission*, T-102/96, ECLI:EU:T:1999:65.

553 ID […][…].

554 ID […][…].

case[555]. The General Court in *Gencor Ltd.* v *Commission* confirmed the implementation doctrine. In that case concerning merger control, the Court took the view that the criterion as to the implementation of an agreement is met by mere sale within the Community, as was the case with Gencor-Lonrho.[556] The Court also established that the proposed concentration had an immediate, substantial and foreseeable effect in the Union. However, in *Intel* v *Commission*, the General Court clarified that demonstrating the implementation of the practices at issue in the EEA or demonstrating qualified effects are alternative and not cumulative approaches for the purposes of establishing that the Commission's jurisdiction is justified under the rules of public international law.[557] The *Gencor* case therefore does not replace or add extra conditions to the *Wood Pulp I* test, which in itself is sufficient to establish jurisdiction.

5.3. Procedural matters

Rights of defence

(281) Quanta submits[558], with reference to the *Wood Pulp II*[559] case law, that the SO must be couched in terms that give undertakings all the information necessary to enable them to properly take cognizance of the conduct complained by the Commission and hence to defend themselves properly. Both, TSST[560] and Quanta[561] claim that they cannot properly exercise their rights of defence, in particular in relation to the facts and allegations based on reference to Annex I of the SO. TSST and Quanta argue that the references to the entire content of Annex I included in the SO without further indication as to the specific document(s) the Commission refers to, do not meet the evidentiary standard set out under the *Wood Pulp II*[562] case. According to TSST, when the Commission intends to rely on a document as part of the evidence supporting its allegations in the SO, it should (i) specifically refer to that document; (ii) set out the relevant facts reflected in that document; and (iii) in the legal part of the SO, raise objections or draw conclusions from it.

(282) In accordance with the case law[563], the SO in this case (independently of its Annex I) clearly sets forth the essential facts and circumstances alleged on which the Commission relies in making its legal conclusions. Thus, the parties have been provided with all the details necessary to identify the conduct complained of by the Commission. As a result, the parties were not precluded from disputing the truth and

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555 Judgment of the Court of Justice of 27 September 1988, *Ahlström and others v Commission*, 89/85, 104/85, 114/85, 116/85, 117/85, 125/85, 126/85, 127/85, 128/85 and 129/85, ECLI:EU:C:1988:447.

556 Judgment of the General Court of 25 March 1999, *Gencor v Commission*, T-102/96, ECLI:EU:T:1999:65, paragraphs 87-88.

557 Judgment of the General Court of 12 June 2014, *Intel* v *Commission*, T-286/09, ECLI:EU:T:2014:547, paragraph 136.

558 ID […][…].

559 Judgment of the Court of Justice of 31 March 1993, *A. Ahlström Osakeyhtiö and others v Commission*, C-89/85, C-104/85, C-114/85, C-116/85, C-117/85 and C-125/85 to C-129/85, ECLI:EU:C:1993:120, paragraph 42.

560 ID […][…].

561 ID […][…].

562 Judgment of the Court of Justice of 31 March 1993, *A. Ahlström Osakeyhtiö and others v Commission*, C-89/85, C-104/85, C-114/85, C-116/85, C-117/85 and C-125/85 to C-129/85, ECLI:EU:C:1993:120 paragraph 42, 153.

563 Judgment of the Court of Justice of 9 July 2009, *Archer Daniels Midland Co. v Commission*, C-511/06 P, ECLI:EU:C:2009:433, paragraphs 85-87 and the case law referred to therein.

relevance of the facts essential for the merits of the case and exercise their rights of defence effectively.

(283) The Commission chose to include Annex I in the SO in order to clearly present the numerous cartel events and the timing, frequency and intensity of cartel contacts. Annex I of the SO included a chronological list of numerous individual cartel contacts, explicitly mentioning the parties involved in those contacts and providing details as to the timing, the subject-matter and an indication of the nature of the competitor discussions along with references to documents in the case file. Annex I of the SO is hence sufficiently clear so as to enable each individual addressee to identify specific events and pieces of evidence held against it.

(284) Furthermore, pursuant to the settled case law[564], documents appended to the SO, but not mentioned therein, may be used in the decision against the addressee of the SO if that addressee could reasonably infer from the SO the conclusions which the Commission intended to draw from them. In this case, Annex I which constitutes an integral part of the SO while complementing its factual part, is not only appended to the SO, it is also clearly referred to in the body of the SO. As it transpires from the body of the SO[565], the documents referred to in Annex I of the SO pertain to the evidence specifically used to substantiate the allegation that there has been a cartel infringement and to demonstrate involvement of the parties therein.

(285) The SO thus clearly allows the parties to reasonably infer the conclusions which the Commission intends to draw from the contacts listed in Annex I. It also follows from the defences which the parties have put forward that they have been in the position to defend themselves extensively both in writing and orally at the hearing against each of the Commission's allegations in the SO, including its Annexes[566].

(286) Finally, each party was not only in the position to identify in Annex I the evidence held against it, it was also given access to that evidence. In conclusion, the inclusion of Annex I in the SO did not violate the parties' rights of defence. The considerations set out in recitals (281)-(286) apply by analogy to this Decision.

Equal treatment

(287) Sony/Optiarc claims[567] that while both leniency applicants compare Sony and Sony Optiarc to [non-addressee] […], the Commission has not charged [non-addressee] with any infringement and maintains that such treatment of Sony and Sony Optiarc by the Commission is discriminatory.

(288) As a general observation, the Commission notes that the choice of the addressees in this Decision is based on a set of clearly established criteria. The Commission pursues its case exclusively against the undertakings for which it has proven the cartel participation to the requisite legal standard[568]. While there is sufficient evidence to impute liability for the ODD cartel infringement to Sony and Sony

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564 Judgment of the General Court of 30 September 2003, *Atlantic Container* v *Commission*, T-191/98 and T-212/98 to T-214/98, ECLI:EU:T:2003:245, paragraph 162 and the case law referred to therein.

565 See Section 4 ("*Description of the cartel*") and Section 4.7 ("*Main evidence regarding individual cartel participants*") of the SO.

566 For example,[…].

567 ID […][…].

568 Judgment of the General Court of 27 February 2014, *InnoLux Corp. v Commission*, T-91/11, ECLI:EU:T:2014:92, paragraph 139.

Optiarc, this is not the case for [non-addressee]. Involvement of Sony and Sony Optiarc on the one hand and that of [non-addressee] on the other hand are neither identical nor comparable based on the evidence in the Commission file.

(289) Furthermore, and in any event, even if the situation of another undertaking to which the decision is not addressed were comparable to that of the addressees, it is settled case-law that an undertaking which has acted in breach of Article 101 of the TFEU cannot escape being penalised on the ground that other undertakings have not been fined[569]. Sony/Optiarc cannot therefore escape liability on the ground that no fine was imposed on other undertaking[570].

5.4. Application of Article 101(1) TFEU and Article 53(1) of the EEA Agreement

5.4.1. Article 101(1) of the TFEU and Article 53(1) of the EEA Agreement

(290) Article 101(1) of the TFEU prohibits as incompatible with the internal market all agreements between undertakings, decisions by associations of undertakings or concerted practices which may affect trade between Member States and which have as their object or effect the prevention, restriction or distortion of competition within the common market, and in particular those which directly or indirectly fix purchase or selling prices or any other trading conditions, limit or control production and markets, or share markets or sources of supply.

(291) Article 53(1) of the EEA Agreement (which is modelled on Article 101(1) of the TFEU) contains a similar prohibition. However, the reference in Article 101(1) to trade *"between Member States"* is replaced by a reference to trade *"between contracting parties"* and the reference to competition *"within the internal market"* is replaced by a reference to competition *"within the territory covered by the ... [EEA] Agreement"*.

5.4.2. Agreements and concerted practices

5.4.2.1. Principles

(292) Article 101(1) of the TFEU and Article 53(1) of the EEA Agreement prohibit agreements and concerted practices between undertakings. [571]

(293) An agreement can be said to exist when the parties adhere to a common plan which limits or is likely to limit their individual commercial conduct by determining the lines of their mutual action or abstention from action in the market. It does not have to be made in writing; no formalities are necessary, and no contractual sanctions or

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569 Judgment of the General Court of 14 March 2013, *Fresh Del Monte* v *Commission*, T-587/08, EU:T:2013:129, paragraph 870. See also judgment of the General Court of 16 November 2006, *Peróxidos Orgánicos, SA* v *Commission*, T-120/04, ECLI:EU:T:2006:350, paragraph 77; Judgment of the General Court of 14 December 2006, *Raiffeisen Zentralbank Österreich AG and Others v Commission*, T-259/02 to T-264/02 and T-271/02, ECLI:EU:T:2006:396, paragraph 139.

570 See to that effect See to that effect judgment of the General Court of 15 June 2005, *Tokai and Others v Commission*, T-71/03, T-74/03, T-87/03 and T-91/03, ECLI:EU:T:2005:220, paragraph 397.

571 The case law of the Court of Justice and the (then) Court of First Instance (now General Court) in relation to the interpretation of Article 101 of the TFEU applies equally to Article 53 of the EEA Agreement. See paragraphs No 4 and 15 as well as Article 6 of the EEA Agreement, Article 3(2) of the EEA Surveillance and Court Agreement, as well as Case E-1/94 of 16.12.1994, *Ravintoloitsijain Liiton Kustannus Oy Restamark*, paragraphs 32-35. References in this text to Article 101 of the TFEU therefore apply also to Article 53 of the EEA Agreement.

enforcement measures are required. The existence of agreement may be express or implicit in the behaviour of the parties.[572]

(294) The concept of agreement in Article 101(1) of the TFEU would apply to the inchoate understandings and partial and conditional agreements in the bargaining process which lead up to the definitive agreement. It is therefore not necessary, in order for there to be an infringement of Article 101(1) of the TFEU, for the participants to have agreed in advance upon a comprehensive common plan. According to the settled case law, in order for there to be an agreement within the meaning of Article 101 of the TFEU, it is sufficient that the undertakings have expressed their joint intention to behave on the market in a certain way.[573] This applies also to gentlemen's agreements which represent a faithful expression of such a joint intention concerning a restriction of competition.[574]

(295) If, for instance, an undertaking is present at meetings in which the parties agree on certain behaviour on the market, it may be held liable for an infringement even where its own conduct on the market does not comply with the conduct agreed. It is also well-settled case-law that "*the fact that an undertaking does not abide by the outcome of meetings which have a manifestly anti-competitive purpose is not such as to relieve it of full responsibility for the fact that it participated in the cartel, if it has not publicly distanced itself from what was agreed in the meetings*".[575] Such distancing should take the form of an announcement by the company, for example, that it would take no further part in the meetings (and therefore did not wish to be invited to them).

(296) Although Article 101(1) of the TFEU and Article 53 of the EEA Agreement draw a distinction between the concept of "concerted practices" and that of "agreements between undertakings", the object is to bring within the prohibition of these provisions a form of co-ordination between undertakings by which, without having reached the stage where an agreement properly so-called has been concluded, they

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572 Judgment of the General Court of 20 March 2002, *HFB Holding and Others v Commission*, T-9/99, ECLI:EU:T:2002:70, paragraphs 199-200 (appeals against the judgment in Case T-9/99 were dismissed in their entirety by the Judgment of the Court of Justice of 28 June 2005, *Dansk Rørindustri and Others v Commission*, C-189/02 P, C-202/02 P, C-205/02 P to C-208/02 P and C-213/02 P, ECLI:EU:C:2005:408), as well as judgment of the Court of Justice of 21 September 2006, *Nederlandse Federatieve Vereniging voor de Groothandel op Elektrotechnisch Gebied v Commission*, C-105/04 P, ECLI:EU:C:2006:592, paragraphs 80, 94-100, 110-113, 135-142, 162.

573 Judgment of the General Court of 20 April 1999, *Limburgse Vinyl Maatschappij N.V. and others v Commission* ("PVC II"), T-305/94, T-306/94, T-307/94, T-313/94 to T-316/94, T-318/94, T-325/94, T-328/94, T-329/94 and T-335/94, ECLI:EU:T:1999:80, paragraph 715.

574 Judgment of the General Court of 20 March 2002, *HFB Holding and Others v Commission*, T-9/99, ECLI:EU:T:2002:70, paragraph 207, (appeals against the judgment in Case T-9/99 were dismissed in their entirety by the judgment of the Court of Justice of 28 June 2005, *Dansk Rørindustri and Others v Commission*, C-189/02 P, C-202/02 P, C-205/02 P to C-208/02 P and C-213/02 P, ECLI:EU:C:2005:408), as well as judgment of the Court of Justice of 21 September 2006, *Nederlandse Federatieve Vereniging voor de Groothandel op Elektrotechnisch Gebied v Commission*, C-105/04 P, ECLI:EU:C:2006:592, paragraphs 80, 94-100, 110-113, 135-142, 162.

575 Judgment of the General Court of 15 March 2000, *Cimenteries CBR and Others v Commission* ("Cement"), T-25/95 etc., ECLI:EU:T:2000:77, paragraph 1389, confirmed by Judgment of the Court of Justice of 7 January 2004, *Aalborg Portland* v. *Commission*, C-204/00 P etc., EU:C:2004:6, paragraphs 81-85.

knowingly substitute practical co-operation between them for the risks of competition.[576]

(297) The criteria of co-ordination and co-operation laid down by the case law of the Court, far from requiring the elaboration of an actual plan, must be understood in the light of the concept inherent in the provisions of the TFEU relating to competition, according to which each economic operator must determine independently the commercial policy which he intends to adopt in the market. This requirement of independence does not deprive undertakings of the right to adapt themselves intelligently to the existing or anticipated conduct of their competitors. However, it strictly precludes any direct or indirect contact between such operators the object or effect of which is either to influence the conduct on the market of an actual or potential competitor or to disclose to such a competitor the course of conduct which they themselves have decided to adopt or contemplate adopting on the market.[577]

(298) Thus, conduct may fall under Article 101(1) of the TFEU as concerted practice even where the parties have not explicitly subscribed to a common plan defining their action in the market but knowingly adopt or adhere to collusive devices which facilitate the co-ordination of their commercial behaviour. Furthermore, the process of negotiation and preparation culminating effectively in the adoption of an overall plan to regulate the market may well also (depending on the circumstances) be correctly characterised as a concerted practice. The existence of a concerted practice can also be demonstrated by evidence that contacts took place between a number of undertakings and that they in fact pursued the aim of removing in advance any uncertainty as to the conduct expected from them on the market.[578]

(299) Although the concept of a concerted practice requires not only a concertation but also conduct on the market resulting from the concertation and having a causal connection with it, it may be presumed, subject to proof to the contrary, that undertakings taking part in such concertation and remaining active in the market will take account of the information exchanged with competitors in determining their own conduct on the market, all the more so when the concertation occurs on a regular basis and over a long period. Such a concerted practice is caught by Article 101(1) of the TFEU even in the absence of anti-competitive effects on the market.[579]

(300) A concerted practice pursues an anti-competitive object for the purposes of Article 101(1) of the TFEU where, according to its content and objectives and having regard to its legal and economic context, it is capable in an individual case of resulting in the prevention, restriction or distortion of competition within the common market. It

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576 Judgment of the Court of Justice of 14 July 1972, *Imperial Chemical Industries v Commission*, C-48/69, ECLI:EU:C:1972:70, paragraph 64 and judgment of the Court of Justice of 31 March 1993, *Ahlström Osakeyhtiö and Others* v *Commission*, C-89/85, C-104/85, C-114/85, C-116/85, C-117/85 and C-125/85 to C-129/85, ECLI:EU:C:1993:120, paragraph 63.

577 Judgment of the Court of Justice of 16 December 1975, *Suiker Unie and Others v Commission*, C-40/73 to C-48/73, C-50/73, C- 54/73 to C-56/73, C-111/73, C-113/73 and C-114/73, ECLI:EU:C:1975:174, paragraph 174.

578 See Judgment of the Court of Justice of 16 December 1975, *Suiker Unie and Others v Commission*, C-40/73 to C-48/73, C-50/73, C- 54/73 to C-56/73, C-111/73, C-113/73 and C-114/73, ECLI:EU:C:1975:174, paragraphs 175, 179 and judgment of the General Court of 12 July 2011, *Fuji Electric Co. Ltd. v Commission*, T-132/07, ECLI:EU:T:2011:344, paragraph 88.

579 See also Judgment of the Court of Justice of 8 July 1999, *Hüls v Commission*, C-199/92 P, ECLI:EU:C:1999:358, paragraphs 158-166.

is not necessary for there to be actual prevention, restriction or distortion of competition or a direct link between the concerted practice and consumer prices. An exchange of information between competitors is tainted with an anti-competitive object if the exchange is capable of removing uncertainties concerning the intended conduct of the participating undertakings. In so far as the undertaking participating in the concerted action remains active on the market in question, there is a presumption of a causal connection between the concerted practice and the conduct of the undertaking on that market, even if the concerted action is the result of a meeting held by the participating undertakings on a single occasion.[580]

(301) In addition, an undertaking, by its participation in a meeting with an anti-competitive purpose, not only pursued the aim of eliminating in advance uncertainty about the future conduct of its competitors but could not fail to take into account, directly or indirectly, the information obtained in the course of those meetings in order to determine the policy which it intended to pursue on the market.[581] According to the now General Court, this conclusion was also valid in case where the participation of one or more undertakings in meetings with an anti-competitive purpose was limited to the mere receipt of information concerning the future conduct of their market competitors.[582]

(302) Moreover, it is established case law that the exchange, between undertakings, in pursuance of a cartel falling under Article 101(1) of the TFEU, of information concerning their respective deliveries, which not only covers deliveries already made but is intended to facilitate constant monitoring of existing deliveries in order to ensure that the cartel is sufficiently effective, constitutes a concerted practice within the meaning of this provision.[583]

(303) As concerns "complex infringements" of long duration, the Commission is not required to characterise the conduct exclusively as "agreements" or "concerted practice". Both concepts are fluid and may overlap. The anti-competitive behaviour may be varied from time to time, or its mechanisms adapted or strengthened to take account of new developments. Indeed, it may indeed not even be possible to make such a distinction, given that an infringement may present simultaneously the characteristics of both forms of prohibited conduct, while when considered in isolation some of its manifestations could accurately be described as one rather than the other. It would be artificial analytically to sub-divide into several forms of infringement what is clearly a continuing common enterprise having one and the

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580 Judgment of the Court of Justice of 4 June 2009, *T-Mobile Netherlands BV and others v Raad van bestuur van de Nederlandse Mededingings-autoriteit*, C-8/08, ECLI:EU:C:2009:343 , paragraph 62; Judgment of the Court of Justice of 19 March 2015, *Dole Food Company Inc. and Dole Fresh Fruit Europe v Commission*, C-286/13 P, ECLI:EU:C:2015:184, paragraph 127.

581 Judgment of the General Court of 24 October 1991, *Rhône-Poulenc v Commission*, T-1/89, ECLI:EU:T:1991:56, paragraphs 122-123; Judgment of the General Court of 12 July 2001, *Tate & Lyle v Commission*, T-202/98, T-204/98 and T-207/98, ECLI:EU:T:2001:185, paragraph 58.

582 Judgment of the General Court of 12 July 2001, *Tate & Lyle v Commission*, T-202/98, T-204/98 and T-207/98,ECLI:EU:T:2001:185, paragraph 58.

583 See Judgment of the General Court of 6 April 1995, *Société Métallurgique de Normandie v Commission*, T-147/89, ECLI:EU:T:1995:67; Judgment of the General Court of 6 April 1995, *Trefilunion v Commission*, T-148/89, ECLI:EU:T:1995:68, paragraph 72 and judgment of the General Court of 6 April 1995, *Société des treillis et panneaux soudés v Commission*, T-151/89, ECLI:EU:T:1995:71.

same overall objective. A cartel may therefore be an agreement and a concerted practice at the same time.[584]

(304) An agreement for the purposes of Article 101(1) of the TFEU does not require the same certainty as would be necessary for the enforcement of a commercial contract at civil law. Moreover, in the case of a complex cartel of long duration, the term "agreement" can properly be applied not only to any overall plan or to the terms expressly agreed but also to the implementation of what has been agreed on the basis of the same mechanisms and in pursuance of the same common purpose. As the Court of Justice has pointed out it follows from the express terms of Article 101(1) of the TFEU that agreement may consist not only in an isolated act but also in a series of acts or a course of conduct.[585]

5.4.2.2. Application in this case

(305) As demonstrated in Section 4 of this Decision, the cartel participants coordinated their behaviour including the bidding strategies in relation to procurement of ODD by Dell and HP. The cartel members either reached explicit agreements or exchanged sensitive information or competitive intentions, which constitute at least concerted practices. More specifically, the parties:

– concerted on intended pricing quotations and/or ranges, planned bidding behaviour, ranking and volume sought or exchanged and verified information on pricing discussions held with customers (see Section 4.6.1)

– shared information on the results of the procurement events (rankings/volumes awarded as well as the final price quoted) or on separate deals reached with the customers (see Section 4.6.2.1); and

– shared other sensitive information such as existing production and supply capacity, inventory status and pull rates (see Section 4.6.2.2), the qualification status (see Section 4.6.2.3), timing of the introduction of new products or upgrades (see Section 4.6.2.4) or quality issues and other procurement related information (see Section 4.6.2.5), thereby reducing the uncertainty about the future conduct of competitors;

(306) Contacts between the cartel participants were regular and repeated, both in terms of their content and timing. As described in detail in Section 4.6, the subject matter of the information subject to collusion was strategically important and useful in order to achieve understanding regarding competitors' strategies in forthcoming procurement events and facilitated coordination of the parties' competitive behaviour (see recital (298)). The collusion consisted predominantly of parallel bilateral contacts, which were a logical choice for the addressees in such a fast moving context of short business cycles of negotiations organized by customers where multilateral contacts would not be functional while bidding was taking place.

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[584] See Judgment of the General Court of 17 December 1991, *Hercules v Commission*, T-7/89, ECLI:EU:T:1991:75, paragraph 264. See also judgment of the General Court of 20 April 1999, *Limburgse Vinyl Maatschappij N.V. and others v Commission*, T-305/94, T-306/94, T-307/94, T-313/94 to T-316/94, T-318/94, T-325/94, T-328/94, T-329/94 and T-335/94, ECLI:EU:T:1999:80, paragraph 696.

[585] See Judgment of the Court of Justice of 8 July 1999, *Commission v Anic Partecipazioni SpA*, C-49/92 P, ECLI:EU:C:1999:356, paragraph 81.

(307) The cartel participants relied on each other's intentions as to their strategy in forthcoming procurement events and took into account the information obtained through mutual exchange in determining their own conduct on the market. The mutual information sharing also enabled the cartel participants to counter different strategies employed by customers to stimulate price competition. They clearly adhered to a common strategy which limited their individual commercial conduct by determining the lines of their mutual action or abstention from action in the market. The cartel participants therefore knowingly substitute practical co-operation between them for the risks of competition.[586]

(308) On the basis of the considerations set out in recitals (305)-(307), the Commission considers that the behaviour in this case presents all the characteristics of an agreement and/or a concerted practice in the sense of Article 101 of the TFEU.

5.4.2.3. Arguments of the parties and assessment thereof by the Commission

Transparency of the ODD market and availability of information from third parties

(309) Quanta, Sony/Optiarc and TSST submit in their replies to the SO, during the oral hearing as well as in their replies to the post-oral hearing request for information ("RFI") (see recital (62)) that Dell and HP provided ODD suppliers with the bidding information which proved presence of an unusual transparency in the ODD industry[587]. Sony/Optiarc and TSST argue with reference to a number of specific documents, which in their view the Commission has disregarded, that the customers' […] or employees acting in other capacities ([…]) would share with ODD suppliers credible and accurate information, for example on rankings and volumes after the tenders[588]. Furthermore, TSST and Sony/Optiarc claim that the Commission failed to assess the evidence showing that cartel participants obtained regularly valuable competitor information also from ODMs, component vendors, specialized industry publications and market research firms.[589]

(310) TSST also submits[590] that vast majority of internal emails cited by the Commission in a bid to prove the collusion contain no information about the source of such information. According to TSST[591], for those internal reports of ODD suppliers where the source is not specified, the presumption must be that the author did not specify it precisely because he or she did not obtain the relevant information through a direct contact with a counterpart at another ODD supplier.

(311) As a preliminary remark, in this case, the Commission relies exclusively on evidence including information originating from ODD suppliers, where the source of information is established either on the basis of the wording of the source document itself or can be reasonably determined based on corroboration, consistent indicia or inference from other documents, corporate statements or phone records. The Decision is thus based on evidence of proven anti-competitive contacts and it does

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586 Judgment of the Court of Justice of 14 July 1972, *Imperial Chemical Industries v Commission,* C-48/69, ECLI:EU:C:1972:70, paragraph 64.

587 ID […][…]; ID […]; ID […]; ID […][…]; ID […]; ID […][…]; ID […][…]; ID […][…]; ID […].

588 ID […][…]; ID […][…]; ID […]; ID […].

589 ID […][…], ID […]; ID […][…].

590 ID […][…].

591 ID […][…].

not rely on contacts between the cartel participants and their customers, ODMs or other third parties (other than ODD suppliers).

(312) The Commission does not dispute that collusive exchanges between cartel participants took place in parallel with cartelists' own business contacts with the customers Dell and HP and, to some extent, also with other parties active on the market, such as ODMs, component vendors and market research companies (hereinafter "*Customer Contacts*").

(313) Nevertheless, both Dell and HP had an established policy of protecting commercially sensitive information from disclosure to ODD suppliers. Dell invested in creating and maintaining the IN system, which masked information about other ODD suppliers, including their identity and enabled blind bids.[592] Equally HP did not share price or volume related information of a particular ODD supplier with any other ODD supplier.[593] The evidence in the Commission's file is consistent and confirms the general application of the policy adopted by the customers in practice. For illustration, an April 2008 […] internal report confirms that[…][594]The […] internal report from January 2008 confirms HP's policy in relation to its ODD suppliers:[…][595] With respect to other entities active on the market, such as ODMs, component vendors and market research companies, the evidence on the file does not show information sharing between the said entities and the ODD suppliers on other than a merely random and sporadic basis.

(314) Hence, in view of the established non-disclosure mechanisms at Dell and HP and as it also follows from the case file, including the parties' replies to the RFI, any provision of information via Customer Contacts, if at all commercially sensitive and relevant for this case, was not systematic or regular.

(315) Furthermore, even if the third parties (in particular customers) have been disclosing information regarding other ODD suppliers, they did so to pursue their own objectives, often bluffing. Also (insofar as the rebuttal of Sony/Optiarc's argument is concerned) Sony/Optiarc's statement that "*Dell and HP frequently shared competitive information with suppliers when they concluded it was in their interest to do so, as did myriad third parties*"[596]supports such conclusion.

(316) As a result, on the occasions where the ODD suppliers had received information via Customer Contacts, they have often been verifying the veracity of such information with their competitors, which only lessened the significance of Customer Contacts in practice. For illustration, the following documents substantiate the Commission's observation:

– an internal […] report (ID […]) on the Dell business: "During the discussion, I questioned him [[…] from Dell] again because it is doubtful that it allocated one supplier 40% ~ 50% for each product in advance […] **After this discussion, I thought that the referred company by […] and […] might be TSST, so I confirmed this.** TSST told me that the deal receiving 40% ~ 50% of each product for 6 months.";

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592 See e.g. ID […]; ID […].
593 See e.g. ID […].
594 ID […].
595 ID […].
596 ID […][…].

– an email sent by […] [Sony] to his counterparts at Lite-On during the times of the Sony/Lite-On cooperation (ID […]) in relation to Dell business: "[…] [Dell] *has been asking for $.05 [cost adder] total, and* ***claims that the other suppliers have already offered such pricing. We have not been able to confirm this price but continue to check***",

– an internal Sony email (ID […]) relating to a particular Dell IN: "*On 10/29 Monday we provided a revision quote of $27.85 ($0.01 as buffer) and* […] [[…] from Dell] ***mentioned that we are currently at 2nd position but it is a tie with another supplier*** *(most likely HLDS). [...]* […] *from Sony]: Can you help to* ***check with the other suppliers and see if they are telling the same story****?*"

(317) Moreover, the information concerning future bidding behaviour or overall strategy of ODD suppliers was inevitably shared within the framework of direct competitor contacts and by definition could not have been received from customers, ODMs or other third parties, which further devalues the significance of information disseminated by third parties other than ODD suppliers.

(318) Hence, the Commission accepts that the ODD suppliers could have been gathering information from numerous sources, including from customers, in order to get an intelligence on the market situation to be able to respond to the market trends and develop their business strategy accordingly. However, this does not alter the established fact that the addressees of the Decision pursued collusive contacts with their competitors in breach of Article 101(1) of the TFEU. The Customer Contacts or increased level of market transparency resulting therefrom by no means could have justified or minimised the importance of the collusive contacts. The existence of Customer Contacts therefore does not in any way affect the validity of the Commission's findings in this Decision.

(319) Moreover, the Commission notes that the parties' claim that unusual transparency existed in the market is inconsistent with the Commission's finding of a vast number of competitor contacts in this case. There would not have been any "need" for those anticompetitive contacts if the ODD market had been as transparent as the parties claim. The parties' claims must also for that reason be dismissed as unfounded.

Probative value of evidence

(320) TSST argues[597] that the allegations against TSST are all bilateral in nature, which means that each and every of the allegations are based only on a single source, namely either the immunity or reduction of fines applicant. Furthermore, according to TSST, several Commission allegations are unsupported by contemporaneous evidence and rely mostly, if not exclusively on uncorroborated corporate statements, which do not have sufficient probative value against TSST. TSST maintains that the corporate statements in this case are not "particularly credible", because firstly, they are often based on speculation and have an ambiguous or vague wording (indicating that the employees of the leniency applicants simply "believed", "thought" or did not have "precise recollection"); and secondly, the leniency applicants themselves often note that there is no contemporaneous evidence confirming what they state in their statements and point out various instances (not mentioned by the Commission) in which TSST refused to participate in any type of coordination. With respect to the

[597] ID […][…].

phone calls documented in the Commission file, TSST[598] submits that there is no indication about their contents and that in the absence of contemporaneous notes or documents clearly related to a specific phone call, phone records alone have no probative value as to the content of the conversations.

(321) In line with the established case law, it is normal for the activities entailed by anti-competitive agreements and practices to take place clandestinely and for the associated documentation to be reduced to a minimum. It follows that, even if the Commission discovers evidence explicitly showing unlawful contacts, it may be only fragmentary and sparse, so that it is often necessary to reconstitute certain details by deduction. Also, in many cases, the existence of an anti-competitive practice or agreement must be inferred from a number of coincidences and indicia which, taken together, may, in the absence of another plausible explanation, constitute evidence of an infringement of the competition rules[599].

(322) It is true that the Commission must produce sufficiently precise and consistent evidence to support the firm conviction that the alleged infringement took place – a condition which is met in this case. However, it is important to emphasise that it is not necessary for every item of evidence produced by the Commission to satisfy those criteria in relation to every aspect of the infringement; it is sufficient if the body of evidence relied on by the Commission, viewed as a whole, meets that requirement[600].

(323) In this case, having regard to the largely bilateral nature of the contacts and the Commission's inability to conduct inspections (due to the fact that the relevant entities and personnel were based outside of the Union), the overwhelming majority of the evidence collected necessarily concerns contacts involving the leniency applicants. Nevertheless, the evidence on the case file establishes existence of the ODD infringement as well as participation therein individually for each of the addressees to the requisite legal standard.

(324) In finding the infringement and participation of individual parties therein the Commission relies on documentary evidence, supported by phone records, and corporate statements of the leniency applicants, which individually or taken together constitute proof of the parties' participation in the cartel. The Commission notes that it primarily uses the phone records to prove the existence of particular competitor contacts, to identify the individuals involved in the contact and hence the source of information, rather than the contents of such contact (which transpire from other evidence on the file). Notwithstanding this, since the timing of the vast body of competitor contacts reflected in the phone records relied upon by the Commission largely coincides with the business cycle of tenders organised by the customers, the

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598 ID […][…].

599 Judgment of the General Court of 2 February 2012, *Denki Kagaku Kogyo Kabushiki Kaisha v Commission*, T-83/08, ECLI:EU:T:2012:48, paragraph 54; Judgment of the Court of Justice of 25 January 2007, *Sumitomo Metal Industries and Nippon Steel* v *Commission*, C-403/04 P and C-405/04 P, ECLI:EU:C:2007:52, paragraph 51 and judgment of the Court of Justice of 17 June 2010, *Lafarge* v *Commission*, C-413/08 P, ECLI:EU:C:2010:346, paragraph 22 and the case-law cited therein.

600 See judgment of the General Court of 26 April 2007, *Bolloré SA and others v Commission*, T-109/02, T-118/02, T-122/02, T-125/02, T-126/02, T-128/02, T-129/02, T-132/02 and T-136/02, ECLI:EU:T:2007:115, paragraph 155, and judgment of the General Court of 4 July 2004, *JFE Engineering* v *Commission*, T-67/00, T-68/00, T-71/00 and T-78/00 ECLI:EU:T:2004:221, paragraphs 179-180.

phone records do support the existence of anti-competitive contacts (see recital (98)). The Commission uses the phone records with caution and merely relies on them in corroboratory manner if there is documentary evidence pointing to an anti-competitive contact that is sufficiently proximate in time to the date of the recorded phone call.

(325) Furthermore, in this case, the corporate statements relied upon are particularly credible (contrary to what TSST claims). More specifically, each of the statements relied upon by the Commission in this Decision is submitted on behalf of the cooperating undertaking, represents the outcome of an internal investigation carried out by that undertaking. Such statements are clear, detailed and based on the testimonies of individuals who have participated in the cartel and were at the material period employees of that cooperating undertaking. Such testimonies do not contradict the body of evidence. On the contrary, they corroborate the body of evidence relied upon by the Commission. In addition, the respective statements have been provided to the Commission clearly upon mature reflection and run counter to the interests of the leniency applicants. Even if the statements' credibility were reduced (which is not the case), such documents still form part of the body of evidence and still may retain probative value as one of a number of coherent indicia which corroborate certain of the essential assertions in other evidence.[601]

(326) The Commission observes that the occasional inability of the leniency applicants to recollect precise details of the cartel events is understandable when taking into account the time gap between the relevant contacts and the date of the submission of the leniency statements. This does not affect the credibility of the statements overall and in particular of those statements which describe in a clear and unequivocal manner details of collusive practices, on which the Commission relies in this Decision. In line with an established case law, the Commission notes that it would be too easy for an undertaking guilty of an infringement to escape any penalty if it was entitled to base its argument on the vagueness of the information produced regarding the operation of an illegal practice in circumstances in which the existence and anti-competitive purpose of the agreement had nevertheless been sufficiently established, as in this case[602]. Furthermore, the fact that no contemporaneous evidence exists for some of the cartel events described in the corporate statements or that TSST would have refused to participate in collusion on some occasions is neither capable of tainting the evidence of the infringement nor amounts to the dissociation of TSST from the anticompetitive conduct described in Section 4 of this Decision.

(327) Moreover, according to TSST[603], the immunity applicants were incentivized to maximize the importance of the alleged infringement reported to the Commission and the reduction of fines applicant sought to provide "significant added value" in order to lower its fine exposure. Hence, TSST believes that the applicants have an added strong motivation to harm TSST and to provide corporate statements that

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601 Judgment of the Court of Justice of 25 January 2007, C-411/04 P, *Salzgitter Mannesmann v Commission*, ECLI:EU:C:2007:54, paragraphs 46-48.

602 See judgment of the General Court of 29 June 2012, *GDF Suez SA v Commission*, T-370/09, ECLI:EU:T:2012:333, paragraph 223 and by analogy also judgment of the General Court of 8 July 2004, *JFE Engineering Corp.,Nippon Steel Corp., Sumitomo Metal Industries Ltd v Commission***,** T-67/00, T-68/00, T-71/00 and T-78/00 ECLI:EU:T:2004:221, paragraph 203.

603 ID […][…].

characterize information in a way that would enable the Commission to allege more, not less infringing conduct.

(328) The Commission observes that any attempt of the leniency applicants to mislead the Commission could call into question the sincerity and the completeness of their cooperation, and thereby jeopardise their chances of benefiting fully under the Leniency Notice[604]. Therefore, although it is possible that the representative of an undertaking which has applied for leniency may submit as much incriminating evidence as possible, the fact remains that such a representative will also be aware of these potential negative consequences of submitting inaccurate information. In the first place, a statement admitting the existence of an infringement entails considerable legal and economic risks, such as actions for damages being brought before the national courts, in the context of which the Commission's establishment of an infringement may be invoked[605]. In the second place, the submission of inaccurate information can lead to a loss of immunity or leniency after it has been conditionally granted[606]. In the third place, the risk of the inaccurate nature of those statements being detected and leading to those consequences is increased by the fact that such statements must be corroborated by other evidence.[607] In this case, the statements provided by the leniency applicants cross-corroborate each other (for example on cartel participants, topics discussed, cartel context), show a coherent pattern of anticompetitive contacts and are consistent with the entire body of documentary evidence relied upon by the Commission. Hence, there is no valid reason to call into question the veracity of statements submitted by the leniency applicants.

Accuracy of translations

(329) Sony/Optiarc claims[608] that many of the contemporaneous emails submitted to the Commission by HLDS were in Korean, and HLDS provided the Commission with tentative English translations requesting the Commission to double-check their accuracy, should it avail itself of them in the course of the proceedings. However, the Commission relies on those translations, while it does not appear to have taken steps to check their accuracy. Sony/Optiarc furthermore claims that some of the translations provided by HLDS are inaccurate[609].

(330) First, HLDS is bound by the duty of genuine cooperation under the Leniency Notice, requiring the leniency applicant to provide accurate, not misleading and complete information[610]. There is no reason to believe that HLDS would have provided inaccurate translations, thereby compromising its chances of benefiting fully under the Leniency Notice. Secondly, the Commission translation services have verified the accuracy of translations disputed by Sony/Optiarc and confirmed their correctness.

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604 See, to that effect, Judgment of the General Court of 16 November 2006, *Peróxidos Orgánicos v Commission*, T-120/04, ECLI:EU:T:2006:350, paragraph 70.

605 Judgment of the Court of Justice of 19 December 2013, *Siemens AG and Others v Commission*, C-239/11 P, ECLI:EU:C:2013:866, paragraph 140-141.

606 Judgment of the Court of Justice of 19 December 2013, *Siemens AG and Others v Commission*, C-239/11 P, ECLI:EU:C:2013:866, paragraph 138.

607 Judgment of the Court of Justice of 19 December 2013, *Siemens AG and Others v Commission*, C-239/11 P, ECLI:EU:C:2013:866, paragraph 138.

608 ID […][…].

609 ID […][…].

610 Point 12a) Leniency Notice.

Reciprocal exchanges

(331) Sony/Optiarc submits[611] that while the evidence on the file suggests that their employees shared information about Sony or Sony Optiarc's intentions respectively in connection with Dell procurement only on a handful of occasions, other ODD suppliers may have provided information to Sony or Sony Optiarc about their intentions without any reciprocal exchange.

(332) First, the Commission notes that Sony/Optiarc does not contest and in fact seems to acknowledge by its argument that some of its contacts and exchanges with competitors had a reciprocal character. Second, the argument that some of the contacts were lacking reciprocity is not relevant for the purpose of assessing the anticompetitive nature of the conduct. It follows from the case-law that an exchange of information does not have to be reciprocal for the principle of autonomous conduct on the market to be undermined. Unilateral disclosure of sensitive information alone removes uncertainty as to the future conduct of a competitor and directly or indirectly influences the strategy of the recipient of the information[612]. The concept of concerted practice hence covers also situations in which the disclosure by one competitor to another of its future intentions or conduct on the market was requested or, at the very least, accepted by the latter[613].

Competitive significance of the information subject to the concertation

(333) Sony/Optiarc observes[614] in general terms that the allegations of its misconduct can be placed in a number of categories – false information, desired ranking, past pricing, ranks or TAM shares, pull rates, qualification status/new product launches, QBR scores, costs, quality issues and supply constraints, none of which give rise to a restriction of competition by object or effect. Sony/Optiarc argues that the Commission alleges a series of "*ad hoc*", disconnected exchanges or disclosures, without explaining how they could fit together, appreciably increase transparency or reduce competition.

(334) First, the Commission observes that Sony/Optiarc analyses allegations with respect to individual categories of information, while disregarding the entire body of evidence as a whole used by the Commission for the given purpose[615]. In line with the established case-law, the evidence of participation in a cartel must be assessed in its entirety, taking into account all relevant circumstances of fact[616] (see recital (322) for further details).

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611 ID […][…].

612 Judgment of the General Court of 24 March 2011, *IBP Ltd, International Building Products France SA v Commission*, T-384/06, ECLI:EU:T:2011:113, paragraph 71; See, to that effect also judgment of the Court of Justice of 23 November 2006, *Asnef-Equifax and Administración del Estado*, C-238/05, ECLI:EU:C:2006:734, paragraph 51 and the case-law cited therein.

613 Judgment of the General Court of 2 February 2012, *Denki Kagaku Kogyo Kabushiki Kaisha v Commission*, T-83/08, ECLI:EU:T:2012:48, paragraph 67.

614 ID […][…].

615 See judgment of the General Court of 14 May 1998, *Enso-Gutzeit OY v Commission*, T-337/94, ECLI:EU:T:2000:76, paragraph 151.

616 See judgment of the General Court of 26 April 2007, *Bolloré and others v Commission*, T-109/02, T-118/02, T-122/02, T-125/02, T-126/02, T-128/02, T-129/02, T-132/02 and T-136/02, ECLI:EU:T:2007:115 , paragraph 155; see also the Opinion of Judge Vesterdorf, acting as Advocate General, in Case T-1/89 *Rhône-Poulenc* v *Commission* ECLI:EU:T:1991:56 – joint Opinion in the *Polypropylene* judgments;

(335) Second, as demonstrated in Section 4 (in particular Section 4.6.2), competitor contacts in relation to all of the individual categories of information introduced by Sony/Optiarc qualify as anticompetitive either independently or assessed together with other relevant facts. The information subject to competitor contacts was disseminated at relatively short intervals, systematically, for the sole benefit of the cartel participants and to the exclusion of other ODD suppliers and was capable of removing uncertainties concerning the intended conduct of the cartel participants on the market[617]. As it transpires from the contemporaneous evidence, the cartel participants would consider the wide spectrum of information gathered from other ODD suppliers, ranging from quality issues to past auction results to intended bidding strategy as "*highly confidential*"[618], "*confidential*"[619], "*internal use only*"[620], "*Secret-Hot info*"[621] and thus competitively significant and sensitive. The parties also made efforts to conceal their contacts and avoid detection of their arrangements. For example, they avoided using the competitor names in their internal correspondence and rather used abbreviations or generic names[622], avoided leaving traces of anticompetitive arrangements[623] and ensured that the competitor discussions were not revealed to the customers[624].

(336) For illustration, the following documents from the case file attest to the competitive significance of QBR (Quarterly Business Review, see recital (38) and Section 4.6.2.3 for more information), pull rates, EOL (end of life, see recitals (150) and (151) for more details), qualification status, TAM (total market allocation), quality engineering issues and other quality factors, supply issues, etc;:

– Internal […] email[625] – *"[…]*;

– Sony email to Dell[626] – "*We hope that our recent strong performance in the **QBR scoring** will **help solidify our offer**, and allow Dell to consider Sony for maximum TAM*";

– Internal […] email[627] –[…];

– Internal […] email[628] – "*[…]* [...] *[…] Now we **will not have to be as competitive** in September.*";

– Internal […] email[629] – "***If Sony/[…] gives up TAM** for December due to the low price, **I will make a deal with […] [Dell]** and obtain more demand.*";

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617 See, to that effect, judgment of the Court of Justice of 28 May 1998, *John Deere Ltd v Commission*, C-7/95 P, ECLI:EU:C:1998:256 paragraph 89-90.

618 ID […].

619 ID […]; ID […].

620 ID […].

621 ID […].

622 ID […] ([…])..

623 ID […] ([…])

624 ID […] ([…]); ID […] ([…]).

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627 ID […].

628 ID […].

629 ID […].

– Internal […] email[630] – *"[…[* ***due to the Engineering issue*** *of the SATA 9.5mm Tray DVD-W, the* ***share*** *[of TSST] for April* ***was adjusted and reduced*** *by 20% share as a penalty*.";

– Internal […] email[631] – " *[…]*";

– Internal […] email[632] – "[…];

– Internal […] email[633] – "*[…] T[SST] Company […] they are* ***trying to secure product volumes*** *during the 2Q off-season. My opinion is that a* ***considerable amount of competition is inevitable***. ";

– Internal […] email[634] – "*[…] for* ***TSST, due to the FFPC Eng. Issue*** *in 07 4Q, it has been found that the* ***inventory has been somewhat piled*** *[…] and has a position that it* ***must take the first place***. ";

– Internal […] email[635] – "***when the prices are the same, the company who has a good QBR record*** *[…]* ***will receive the higher ranking***";

– Internal […] email[636] –[…];

– HP email to […][637] – "*BPC* ***awards will vary*** *by month* ***depending on the supplier's qualification status****. […] HPSS [Hewlett-Packard Supplier Scoreboard] score and* ***cost of quality weighing will be factored into ranking***. ";

– Internal […] email[638] – "***If […] puts limit on its supply volume****, the circumstances will be that T*[SST] will* ***naturally be taking part of our shares***. " and

– Internal […] email[639] – "*Let me share with you […]'s DVD-ROM status update […]* ***Due to*** *[…]* ***supply issue****, they only can supply the maximum 100~110K per month […] Thus,* ***the current initial price*** *($ 13.70) is* ***likely to be maintained without adjustment during the Auction.*** "

(337) Third, despite the variety of information shared among ODD suppliers, the collusive contacts were not disconnected and in fact pursued an identical aim of accommodating optimal ODD volumes by the cartel members at price levels higher than they would have been in the absence of the collusion.

(338) Fourth, the Commission notes that Sony/Optiarc's argument ignores the fact that the behaviour in which it was involved also concerned future prices discussed with other ODD suppliers ([…]), which, by its nature, is deemed anticompetitive by object.

630 ID […].
631 ID […].
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634 ID […].
635 ID […].
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637 ID […].
638 ID […].
639 ID […].

(339) With respect to the disclosure of past prices, Sony/Optiarc argues[640] that even if used as the starting or opening price in an upcoming IN, it was of little competitive significance, in particular because it would (at most) only influence an ODD supplier's first bid, which had little bearing in practice on the final price.

(340) The Commission notes that the results of a particular tender, including the auction price were not public (notwithstanding sporadic disclosure of information by customers, which was often verified with the competing ODD suppliers) and that the customers even took steps to keep this information secret from the ODD suppliers[641] (see also recitals (102) and (313)). The auction results have the nature of a business secret[642] and not only are they not public, they also have an inevitable impact on behaviour and position adopted by the ODD supplier in subsequent tenders as well as on overall strategy pursued on the market. Moreover, in this case the auction results were shared among ODD suppliers frequently and systematically over an extended time period, for the sole benefit of the cartel members and to the exclusion of other ODD suppliers[643]. The ODD suppliers even collected the auction results for the bidding events that they did not participate in to keep track of the existing level of prices[644]. Furthermore and contrary to what Sony/Optiarc submits, the final price from a previous tender not only had bearing on the price evolution in the subsequent tenders, but could also be maintained in the subsequent tender periods[645]. Therefore, there is no doubt as to the competitive significance of auction results and about anticompetitive nature of the exchange of such data, in particular in combination with collusion on other aspects covered by this case. Such exchange enabled the cartel participants to better foresee the future behaviour of their competitors and to take this into account when planning their own future business conduct[646], hence eliminating or, at the very least, substantially reducing uncertainty as to the conduct to expect of the other on the market[647].

(341) Sony/Optiarc claims[648] that if one ODD supplier provides false information to another, the two ODD suppliers are by definition not colluding or coordinating their behaviour while dissemination of false information into the market actually increases, rather than reduces uncertainty. Furthermore, according to Sony/Optiarc, if

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640 ID […][…].

641 See ID […] (Internal […] email – […]"); ID […] (Internal […] email –[…].

642 E.g. Internal […] email ID […] reporting on the auction results (ranking and price) of the competitors describes the results as "***Secret-Hot info***". The Court also confirmed in its judgment of the General Court of 11 March 1999, *Thyssen Stahl AG v Commission*, T-141/94, ECLI:EU:T:1999:48, paragraph 403 that e.g. very recent market shares of participants (which broadly fall under a similar category of information as the auction results) which are not publicly available, are by their very nature confidential data.

643 See, to that effect judgment of the Court of Justice of 28 May 1998, *John Deere Ltd v Commission*, C-7/95 P, ECLI:EU:C:1998:256 paragraph 89-90.

644 See e.g. ID […].

645 See, e.g. ID […] (Internal […] email) stating: […] or ID […] (Internal […] email), reporting on discussion with TSST, according to which […] or ID […].(Internal […] email), regarding an ongoing HP auction, in which […] ([…]) confirms that […] "

646 See, e.g. ID […].(internal […] email): "**[..]* [[…]]"

647 Judgment of the General Court of 15 March 2000, *Cimenteries CBR SA and others v Commission*, T-25/95, T-26/95, T-30/95 to T-32/95, T-34/95 to T-39/95, T-42/95 to T-46/95, T-48/95, T-50/95 to T-65/95, T-68/95 to T-71/95, T-87/95 to T-88/95, T-103/95 and T-104/95, ECLI:EU:T:2000:77, paragraph 1852.

648 ID […][…].

and when the undertaking provided deliberately inaccurate information, it did so because of having an interest in lying – to obtain competitive advantage. In other cases, Sony/Optiarc claims to have likely provided inaccurate information because its account managers had no pricing or bidding authority and did not always have the most recent or accurate view of their management's strategies.

(342) The Commission notes that cheating may occur during the life-span of the cartel, but will not however deprive the arrangement from its anticompetitive character. In fact, by the sheer fact of disseminating information to other cartel participants – no matter whether accurate or inaccurate, the party purports to show its adherence to the cartel, hence reinforcing the other participants' belief that it subscribed to what was decided and would comply with it[649].

(343) Furthermore, the fact that the parties may have had subjective intentions undoubtedly does not exonerate them from liability for cartel participation. The fact that Sony and Sony Optiarc sought to obtain whatever competitive advantage they could from the collusive contacts implies that they were simply trying to exploit the cartel for their own benefit, but in legal terms this can in no way be indicative of lack of involvement in the cartel (see recital (453)).

(344) Moreover, the fact that the account managers on some occasions did not possess accurate information for reasons internal to the undertaking does not invalidate the Commission findings of Sony and Sony Optiarc's participation in the infringement, since the mere involvement of Sony and Sony Optiarc's employees, be it active or passive, lack of dissociation and presumed ability to communicate internally the outcome of the coordination would have led the other cartel participants to believe that Sony and Sony Optiarc subscribed to the cartel and would comply with it[650].

5.4.3. Single and continuous infringement

5.4.3.1. Principles

(345) A complex cartel may properly be viewed as a single and continuous infringement for the time frame in which it existed. The General Court has pointed out that the concept of 'single agreement' or 'single infringement' presupposes a complex of practices adopted by various parties in pursuit of a single anti-competitive economic aim.[651]

(346) According to settled case-law, an infringement of Article 101(1) of the TFEU can result not only from an isolated act, but also from a series of acts or from continuous conduct, even if one or more aspects of that series of acts or continuous conduct could also, in themselves and taken in isolation, constitute an infringement of that provision[652]. It would be artificial to split up such continuous conduct, characterised

649 See judgment of the Court of Justice of 25 January 2007, *Sumitomo Metal Industries Ltd and Nippon Steel Corp. v Commission*, C-403/04 P and C-405/04 P, ECLI:EU:C:2007:52, paragraph 48.

650 Judgment of the Court of Justice of 7 January 2004, *Aalborg Portland A/S and Others v. Commission*, C-204/00P C-205/00P, C-211/00P, C-213/00P, C-217/00P and C-219/00P, ECLI:EU:C:2004:6, paragraph 82.

651 Judgment of the General Court of 15 March 2000, *Cimenteries CBR and Others v Commission*, T-25/95 etc., ECLI:EU:T:2000:77, paragraph 3699.

652 Judgment of the Court of Justice of 6 December 2012, *Commission v Verhuizingen Coppens NV*, C-441/11 P, ECLI:EU:C:2012:778, paragraph 41 and judgment of the Court of Justice of 24 June 2015, *Del Monte* v *Commission*, C-293/13 P, ECLI:EU:C:2015:416, paragraph 156.

by a single purpose, by treating it as consisting of several separate infringements, when what was involved was a single infringement which progressively manifested itself in both agreements and concerted practices.[653] Accordingly, if the different actions form part of an 'overall plan' because their identical object distorts competition within the common market, the Commission is entitled to impute responsibility for those actions on the basis of participation in the infringement considered as a whole[654].

(347) The agreements and concerted practices referred to in Article 101(1) of the TFEU necessarily result from collaboration by several undertakings, who are all co-perpetrators of the infringement but whose participation can take different forms according, in particular, to the characteristics of the market concerned and the position of each undertaking on that market, the aims pursued and the means of implementation chosen or envisaged[655]. Internal conflicts and rivalries, or even cheating may occur, but will not prevent the arrangement from constituting an agreement/concerted practice for the purposes of Article 101 of the TFEU where there is a single common and continuing objective.

(348) The mere fact that each participant in a cartel may play the role which is appropriate to its own specific circumstances does not exclude its responsibility for the infringement as a whole, including acts committed by other participants but sharing the same unlawful anti-competitive aim. An undertaking which takes part in the common unlawful enterprise by actions which contribute to the realisation of the shared objective is equally responsible, for the whole period of its adherence to the common scheme, for the acts of the other participants pursuant to the same infringement. That is the position where it is shown that the undertaking intended, through its own conduct, to contribute to the common objectives pursued by all the participants and that it was aware of the offending conduct planned or put into effect by other undertakings in pursuit of the same objectives or that it could reasonably have foreseen it and was prepared to take the risk[656].

(349) An undertaking may thus have participated directly in all the forms of anti-competitive conduct comprising the single and continuous infringement, in which case the Commission is entitled to attribute liability to it in relation to that conduct as a whole and, therefore, in relation to the infringement as a whole. Equally, the undertaking may have participated directly in only some of the forms of anti-competitive conduct comprising the single and continuous infringement, but have been aware of all the other unlawful conduct planned or put into effect by the other participants in the cartel in pursuit of the same objectives, or could reasonably have

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653 Judgment of the General Court of 17 December 1991, *Enichem Anic v Commission*, T-6/89 ECLI:EU:T:1991:74, paragraph 204, upheld by the judgment of the Court of Justice of 8 July 1999, *Commission v Anic Partecipazioni*, C-49/92 P ECLI:EU:C:1999:356, paragraph 82.

654 Judgment of the Court of Justice of 6 December 2012, *Commission v Verhuizingen Coppens NV*, C-441/11 P, ECLI:EU:C:2012:778, paragraph 41 and judgment of the Court of Justice of 24 June 2015, *Del Monte* v *Commission*, C-293/13 P, ECLI:EU:C:2015:416, paragraph 156.

655 Judgment of the Court of Justice of 8 July 1999, *Commission v Anic Partecipazioni*, C-49/92 P, ECLI:EU:C:1999:356, paragraph 79.

656 Judgment of the Court of Justice of 8 July 1999, *Commission v Anic Partecipazioni*, C-49/92 P, ECLI:EU:C:1999:356, paragraph 83; Judgment of the Court of Justice of 24 June 2015, *Del Monte* v *Commission*, C-293/13 P, ECLI:EU:C:2015:416, paragraph 157 and judgment of the Court of Justice of 6 December 2012, *European Commission v Verhuizingen Coppens NV*, C-441/11 P, ECLI:EU:C:2012:778, paragraph 42.

foreseen that conduct and have been prepared to take the risk. In such cases, the Commission is also entitled to attribute liability to that undertaking in relation to all the forms of anti-competitive conduct comprising such an infringement and, accordingly, in relation to the infringement as a whole[657].

(350) On the other hand, if an undertaking has directly taken part in one or more of the forms of anti-competitive conduct comprising a single and continuous infringement, but it has not been shown that that undertaking intended, through its own conduct, to contribute to all the common objectives pursued by the other participants in the cartel and that it was aware of all the other offending conduct planned or put into effect by those other participants in pursuit of the same objectives, or that it could reasonably have foreseen all that conduct and was prepared to take the risk, the Commission is entitled to attribute to that undertaking liability only for the conduct in which it had participated directly and for the conduct planned or put into effect by the other participants, in pursuit of the same objectives as those pursued by the undertaking itself, where it has been shown that the undertaking was aware of that conduct or was able reasonably to foresee it and prepared to take the risk[658].

(351) In the context of a cartel comprising a network of parallel bilateral contacts, Commission is not and cannot even possibly be required to produce individualised evidence of actual awareness about all cartel aspects for each and every cartel participant, otherwise it would be too easy for non-cooperating undertakings guilty of an infringement to escape any penalty or part of it[659]. In any event, the Commission is not obliged to demonstrate that the parties were aware of all details concerning bilateral arrangements between the other parties; it is sufficient if each party is aware about the general scope and essential characteristics of the cartel as a whole[660]. The fact that individual parties are not familiar with the details of some collusive contacts taking place between various pairs of the cartel participants in which they did not participate or the fact that they were unaware of the existence of some of such contacts, cannot detract from the Commission's finding that they participated in the cartel as a whole[661].

5.4.3.2. Application in this case

(352) On the basis of the facts described in Section 4 […], any one of the aspects of conduct in respect of any customer concerned (Dell or HP) or any set (or several sets) of bilateral contacts has as its object the restriction of competition and therefore

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657 Judgment of the Court of Justice of 6 December 2012, *Commission v Verhuizingen Coppens NV*, C-441/11 P, ECLI:EU:C:2012:778, paragraph 43 and judgment of the Court of Justice of 24 June 2015, *Del Monte* v *Commission*, C-293/13 P, ECLI:EU:C:2015:416, paragraph 158.

658 Judgment of the Court of Justice of 6 December 2012, *Commission v Verhuizingen Coppens NV*, C-441/11 P, ECLI:EU:C:2012:778, paragraph 44 and judgment of the Court of Justice of 24 June 2015, *Del Monte* v *Commission*, C-293/13 P, ECLI:EU:C:2015:416, paragraph 159.

659 See, by analogy judgment of the General Court of 8 July 2004, *JFE Engineering and Others v Commission*, T-67/00, T-68/00, T-71/00 and T-78/00, ECLI:EU:T:2004:221, paragraph 203.

660 See Judgment of the General Court of 14 December 2006, *Raiffeisen Zentralbank Österreich AG and Others v Commission*, T-259/02 to T-264/02 and T-271/02, ECLI:EU:T:2006:396, paragraph 193 and Commission Decision of 15 October 2008 relating to a proceeding under Article 101 of the TFEU in case COMP/39188 – Bananas, recital 252.

661 See, to that effect Judgment of the General Court of 14 December 2006, *Raiffeisen Zentralbank Österreich AG and Others v Commission*, T-259/02 to T-264/02 and T-271/02, ECLI:EU:T:2006:396, paragraph 193.

constitutes an infringement of Article 101(1) of the TFEU (see also Section 5.3.4). However, the facts described in Section 4 […] at the same time together meet the criteria for a single and continuous infringement of Article 101(1) of the TFEU and Article 53(1) of the EEA Agreement given (a) the single anti-competitive aim of the participants, (b) the fact that the parties intentionally contributed in their own way to the single aim and (c) the parties were aware or should have been aware of the general scope of the contacts as a whole and of their anti-competitive nature[662].

(353) In terms of undertakings involved, the cartel involved for a substantial period the same members. Frequent and consistent contacts took place amongst individuals responsible for sales to Dell or HP (and sometimes to both customers) throughout the whole period of the infringement (see Section 4.6.3). Furthermore, the infringement continued uninterrupted despite of numerous changes in the corporate structures of the undertakings involved (see Section 2.1 for more details), relocation of the ODD suppliers' offices and change of account managers. The single and continuous nature of the infringement is thus demonstrated by the consistent pattern of collusive contacts which took place in the same or similar manner over a long period, as demonstrated in Section 4.

(a) The existence of an overall plan with a single aim

(354) The cartel consists of a regular and clearly distinguishable network of collusive, largely bilateral contacts forming an overall plan. All addressees systematically shared their future intentions about strategy as to the price or ranking in forthcoming procurement events. The parties further coordinated their behaviour during the procurement events and regularly and systematically monitored the results of the past procurements events (see Section 4.6.2.1). As a result, the parties were able to determine in advance the parameters of their competition in bidding events and did not necessarily need to bid as aggressively to achieve a certain desired position.

(355) Through these collusive contacts the addressees of the Decision pursued a single anti-competitive and economic aim to distort the normal operation of competition for ODD procurement events organised by Dell and HP with respect to defining parameters such as price and ranking dictating volume allocation as well as with respect to other commercially sensitive information. This aim was shared by all addressees and existed throughout the infringement period.

(356) The Commission observes that the cartel participants maintained contacts with a view to remove or limit strategic uncertainty on the market as to their future behaviour, likely customers' commercial choices or negotiation strategies.

(b) All parties intentionally contributed in their own way to that single aim

(357) Section 4 […] demonstrate that each of the parties was involved in the cartel conduct and intentionally contributed to the realisation of the common objective described in recital (355) in the manner appropriate to their own specific circumstances.

(358) All cartel participants were involved in the majority, if not all the aspects of the cartel conduct described in recital (305) . TSST and HLDS were involved in the cartel from the outset and remained active in the cartel until its final stages. While the participation of the other parties was more limited in time or restricted to fewer

662 […] (ID […]) […].

cartel contacts compared with TSST and HLDS, none of them qualifies as a fringe cartel participant. Each party's contribution was influenced by the organic developments of the cartel over time, the characteristics of the market concerned, the position of each undertaking on that market[663] and circumstances surrounding the detection of the ODD cartel.

(359) There is inevitably more evidence in the file regarding contacts involving the major ODD suppliers such as TSST, HLDS, Lite-On (later Philips-Lite-On), generally aiming for more volume (that is high ranking) than evidence on contacts involving other addressees that are often satisfied with less volume at higher prices. Accordingly, there is a lesser incidence on the file concerning the addressees aiming for higher prices such as Sony, Sony Optiarc and Quanta.

(360) Notwithstanding the varying intensity and frequency of proven cartel contacts ([…]), the involvement of each party was to serve its own purpose when needed and reflects intentional contribution to the single aim described in recital (355).

(c) Parties were aware of the conduct planned or put into effect by the other undertakings in pursuit of that same single aim or could have reasonably foreseen it and were prepared to take the risk

(361) As set out in Section 5.4.3.1 (in particular in recital (351)), there is no need to demonstrate that the parties were aware of all details concerning bilateral arrangements between the other parties. The fact that individual parties are not familiar with the details of some collusive contacts taking place between various pairs of the cartel participants in which they did not participate or the fact that they were unaware of the existence of some of such contacts, cannot detract from the Commission's finding that they participated in the cartel as a whole.

(362) It is undisputed that the majority of contacts in this case took place at a bilateral level and consequently that the individual parties did not take part directly in all the contacts covered by this Decision. In general, the parties did not necessarily have to engage in direct contacts with each of the other parties to remove or limit strategic uncertainty on the market as to their future behaviour[664], as they were concerned only by the closest competitor or competitors in order to achieve this goal or because competitors shared with them the information they obtained from the other competitors[665]. In such instances there was generally no need for the competitor on the receiving end to contact other competitors just to confirm what it had already learned from the competitor with whom it had been in contact.

(363) In the present case, the element of awareness is established individually for all parties based on a number of evidentiary pieces including corporate statements[666] and contemporaneous evidence as well as indicia predating or coinciding with the infringement period. Before discussing individually each undertaking's awareness of

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663 Compare judgment of the Court of Justice of 8 July 1999, *Commission v Anic Partecipazioni*, C-49/92 P, ECLI:EU:C:1999:356, paragraph 79; Judgment of the General Court of 12 July 2011, *Hitachi Ltd and Others v Commission*, T-112/07, ECLI:EU:T:2011:342, paragraph 287.

664 See e.g. […] (ID […]): "[…]".

665 See recitals (117), (129) and (188).

666 According to ID […], "[…]" Furthermore, according to ID […], […]. Moreover, […] (ID […]).

the anti-competitive conduct in which it did not directly participate, the Commission[…], […], […]. […][667]. […][668]. […][669] […][670]. […][671] […].

Philips, PLDS and Lite-On

(364) […][672]. Furthermore, the evidence on the file shows that each of the immunity applicants, for the period of their cartel involvement, actually were, or must have been aware of the other ODD suppliers participating in the cartel at the given time[673] and of the fact that those ODD suppliers engaged in parallel anti-competitive contacts (see recital (188) for more details).

(365) […][674], […].[675] […][676] which also indicates that PLDS was aware of the parallel contacts between other competitors.

(366) Since Philips' participation in the HP-related contacts has not been established and there is no proof that Philips was aware of those contacts (most of which took place after Philips' participation in the cartel had already ended), the Commission does not hold Philips liable for the part of the infringement that relates to HP (meaning the bilateral contacts between the other participants relating to HP).

HLDS

(367) […]HLDS, […] has been in collusive contacts with TSST, Sony, Sony Optiarc, Quanta, PLDS, Lite On and Philips[677] and that despite of the bilateral nature of the cartel contacts, HLDS was aware that parallel contacts between the other ODD suppliers were taking place. […] the contacts between Quanta and PLDS, between PLDS and Sony and between HLDS and PLDS were strong. […] HLDS was aware that parallel contacts between Sony Optiarc and TSST and between Sony Optiarc and PLDS were taking place: […][678]. HLDS was also aware of the parallel contacts between the other cartel participants because the ODD supplier with whom it was in contact would sometimes provide information not only on its own but also on the strategy of other ODD suppliers[679]. […][680], […][681], […][682]) also show HLDS' awareness of contacts between other cartel participants.

Quanta

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667 ID […].
668 "[…]" (ID […])
669 Quanta and Optiarc were not concerned by[…].
670 See, to that effect judgment of the General Court of 6 March 2012, *UPM-Kymmene Oyj v Commission*, T-53/06, ECLI:EU:T:2012:10, paragraph 57.
671 ID […] and ID […].
672 ID […].
673 See ID […]; ID […], ID […], ID […], ID […], ID […], ID […], ID […], ID […], ID […], ID […], ID […], ID […], ID […], ID […].
674 ID […], in connection with ID […].
675 ID […].
676 ID […].
677 ID […], ID […], ID […] and ID […].
678 ID […].
679 ID […].
680 ID […].
681 ID […].
682 ID […].

(368) A number of contemporaneous evidentiary pieces demonstrate that Quanta was aware of the other parties' involvement in the ODD cartel throughout the period of Quanta's participation. First, Quanta was copied in an internal Sony Optiarc email dated 14 February 2008[683] revealing anti-competitive contacts between Sony Optiarc and TSST as well as between Sony Optiarc and PLDS: "*<IN Pre-Information>..**TSST mentioned that they will be price leader but they do not want 60% TAM** as they have concern on supply..**PLBDS mentioned that they will not be aggressive on price and maybe only looking at the 10% TAM** offline negotiation*"[684] Second, an internal Quanta email of 24 October 2008 reporting on an ongoing HP tender involving PLDS, TSST, HLDS and Quanta sets out: "*in order to protect the price in certain level, **suppliers have the consensus to keep the price** no lower than* USD 24.25"[685]. This email demonstrates that, by colluding with PLDS, TSST and HLDS, Quanta was aware of the unlawful behaviour of the other undertakings and shared the same anticompetitive objective with them. Third, series of other emails[686] also show that by engaging in numerous cartel contacts relating to Dell or HP tenders, although of largely bilateral nature and concerning various bidding events and involving various parties, Quanta knew or could have reasonably foreseen that these contacts were not isolated, but were united by the same objective and constituted part of a larger ODD cartel consisting of a wider network of parallel contacts. […][687].

Sony

(369) The evidence shows that Sony was aware of the other cartel participants[688] active in the cartel over the period of Sony's involvement as well as of the fact that parallel bilateral contacts between them were taking place. An email of 24 August 2004 from Lite-On to Sony[689] for instance revealed to Sony that an anti-competitive contact between Lite-On and TSST had taken place: "[…]".

(370) Sony itself also passed on information obtained in bilateral contacts within the cartel network and it must have known or at least taken the risk that others would do the same. Internal Lite-On emails[690] from 2 November 2004, 1 June 2006 as well as an internal Sony email from 15 September 2006[691], for instance, show that Sony repeatedly engaged in collusive contacts with both HLDS and TSST and that it subsequently informed another cartel participant, Lite-On, thereof. […][692] […]: "[…]".

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683 […].

684 ID […].

685 ID […].

686 ID […], ID […], ID […]; ID […].

687 ID […], ID […], ID […].

688 While Sony might not have been aware of […] participation in the cartel, this could be explained by the very short overlap in participation of Sony and […] (period 7 August 2006-15 September 2006) and the fact that […] might not have been very active in its cartel involvement right from the outset.

689 ID […]. […].

690 ID […], ID […].

691 ID […].

692 ID […].

(371) Therefore, the evidence shows that Sony could have foreseen the conduct of the other undertakings and was prepared to take the risk.

(372) Since Sony's participation in the HP-related contacts has not been established and there is no proof that Sony was aware of those contacts, the Commission does not hold Sony liable for the part of the infringement that relates to HP (meaning the bilateral contacts between the other participants relating to HP).

Sony Optiarc

(373) The evidence demonstrates that Sony Optiarc regularly passed on the information it received during bilateral contacts within the cartel network and thus must have known or at least taken the risk that others would do the same. An internal […] email of 20 June 2007 regarding a tender involving HLDS, Sony Optiarc, TSST and PLDS confirms that Sony Optiarc shared the competitor information that it had obtained from TSST, with PLDS: […]"[693] The fact that Sony Optiarc shared with its competitors information gathered from other ODD suppliers transpires also from an internal […] email dated […] and relating to a bidding event involving TSST, Sony Optiarc, PLDS and HLDS: "The main competitor for this 9.5mm Tray DVD-W RFQ is SNO [Sony Optiarc] company, and currently it is not possible to confirm SNO's […] offer. However, **SNO is also already checking up on the price levels of T[SST] and** […] company"[694].

(374) Furthermore, an internal Sony Optiarc email from 14 February 2008[695] (see recital (368)) shows that the undertaking engaged in collusive contacts with TSST and PLDS and subsequently disclosed to another cartel participant, Quanta,[696] sensitive information acquired as a result of the competitor coordination. Additional evidence, such as internal […] emails[697] from 18 September 2007 and from 25 July 2007 […] confirm that Sony Optiarc has engaged in anticompetitive contacts with its competitors on numerous occasions, with respect to various Dell tenders. By engaging in these various contacts, Sony Optiarc knew or could have reasonably foreseen that the contacts were not isolated, but were united by the same objective and constituted part of a larger ODD cartel consisting of a wider network of parallel contacts. […][698] which also indicates that Sony Optiarc could have reasonably foreseen parallel contacts between other competitors. In light of the recitals (373)-(374), Sony Optiarc could reasonably have foreseen or at least took the risk that its counterparts were planning or putting into effect similar conduct as it did itself in pursuit of the same objectives.

(375) Since Sony Optiarc's participation in the HP-related contacts has not been established and there is no proof that Sony Optiarc was aware of those contacts, the Commission does not hold Sony Optiarc liable for the part of the infringement that relates to HP (meaning the bilateral contacts between the other participants relating to HP).

TSST

693 ID […].
694 ID […].
695 ID […].
696 […].
697 ID […] and ID […].
698 ID […].

(376) The evidence on the file demonstrates that TSST was aware of the unlawful conduct planned or put into effect by the other undertakings in pursuit of the same objectives, or could have reasonably foreseen that conduct and was prepared to take the risk. First, an internal […] email dated […] discussing ranking of ODD suppliers (in this case also PLDS, TSST and HLDS) indicates that TSST was aware of […] talking to the other ODD suppliers and TSST was prepared to take the risk that the sensitive information disclosed to […] could be circulated to other competitors: "***Although TSST is our competitor, they would know that I can contact others so I do not think that TSST lied.***"[699] Furthermore, as mentioned in recital (373), an observation from a direct cartel participant for […][700] indicates that TSST could have reasonably foreseen parallel contacts between other competitors. Another one of the direct cartel participants […], also explains that […]([…]on behalf of TSST) had a lot of information on current pricing, intentions on aggressiveness, results of bid events, quality and production issues about other competitors, in particular Sony and HLDS, which he shared with him[701]. This shows that TSST regularly passed on the information it received during bilateral contacts within the cartel network. In addition to that, series of emails on the Commission file[702] show that across the cartel period, TSST engaged in collusive contacts with the other addressees of this Decision. While such contacts mainly had a bilateral character, they were all associated with Dell and/or HP tenders for ODD supplies, they all concerned coordination of bidding behaviour and TSST was or must have been aware that all the other parties pursued the same collusive objective by resorting to contacts not only with TSST, but also with other cartel participants.

(377) In light of the recitals (361)-(376), the Commission concludes that each of the parties was aware of the actual conduct planned or put into effect by the other participants in pursuit of the same objectives or at the very least could reasonably have foreseen it and was prepared to take the risk. Individual undertakings must have at least foreseen the offending conduct of the other participants, given the unity of the cartel objective, similarity of the cartel manifestations and the fact that the counterparts involved in the mostly bilateral collusive contacts were alternating[703] (for example in one instance, there is evidence of HLDS being in contact with TSST, in another with PLDS). Moreover, the fact that each of the individual parties was involved in multiple competitor contacts comprising various pairs or groups of ODD suppliers regarding various procurement events[704] also supports the conclusion that the parties were or at the very least ought to have been aware of a wider, overarching conspiracy involving all the addressees of the Decision.

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699 ID […].

700 ID […].

701 ID […].

702 For example ID […], ID […], ID […], ID […], ID […], ID […], ID […], ID […] or ID […].

703 See, to that effect judgment of the General Court of 16 June 2011, *Team Relocations NV, Amertranseuro International Holdings Ltd, Trans Euro Ltd,Team Relocations Ltd v Commission,* T-204/08 and T-212/08, ECLI:EU:T:2011:286, paragraph 52-53. (The judgment was upheld by the judgment of the Court of Justice of 11 July 2013, *Team Relocations NV and Others* v *Commission*, C-444/11 P, ECLI:EU:C:2013:464)

704 The group of undertakings implicated in the individual cartel manifestations could have varied, depending for example on (i) whether the undertakings were invited to a particular bidding event at all, (ii) whether they had an interest in following up on bidding behaviour of other ODD suppliers (for example because of the planned participation in subsequent events […]) or (iii) depending on personal relationships and nationality of the parties (as confirmed e.g. by ID […]).

Conclusion

(378) The Commission concludes that the facts described in Section 4 […] constitute a single and continuous infringement having an overall plan of distorting the normal operation of competition for ODD procurement events organised by Dell and HP within the meaning of Article 101 of the TFEU and Article 53 of the EEA Agreement.

(379) The Commission holds Lite-On, PLDS, HLDS, TSST and Quanta liable for the whole single and continuous infringement, whereas it holds Philips, Sony and Sony Optiarc only liable for the single and continuous infringement insofar as it related to Dell.

5.4.3.3. Arguments of the parties and assessment thereof by the Commission

Existence of a common, underlying plan

(380) TSST argues[705] that the Commission has not demonstrated the existence of a common plan encompassing all the alleged contacts, which occurred in an unstructured fashion (to the extent they did occur). According to TSST[706], vast majority of the alleged bilateral contacts relate to discussions on specific procurement events that have self-standing nature, the evidence refers only to events specific to one customer account[707] and it is not clear how the separate instances of conduct were linked. Similarly, Sony/Optiarc argues[708] that there was a little evident relationship between separate tenders, which were numerous and variable, run differently by Dell and HP respectively, that they were managed by separate teams at ODD suppliers and that the products subject to tenders varied widely. According to Sony/Optiarc, the Commission fails to demonstrate that separate incidents of allegedly unlawful conduct are linked to one another by the same object and the same subjects[709]. Similarly, Quanta[710] submits that the Commission has failed to prove the existence of an overall plan with common objectives. It claims[711] that the Commission gives no reasoning for its treatment of Dell and HP as distinct from other ODD customers, but sufficiently similar to each other that their many separate procurement events could be subject to the same alleged cartel.

(381) According to settled case-law, an infringement of Article 101(1) of the TFEU can result not only from an isolated act, but also from a series of acts or from continuous conduct, even if one or more aspects of that series of acts or continuous conduct could also, in themselves and taken in isolation, constitute an infringement of that provision. Accordingly, if the different actions form part of an 'overall plan', because their identical object distorts competition within the common market, the

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705 ID […][…].

706 ID […][…].

707 ID […][…].

708 ID […][…].

709 Sony/Optiarc refers to the judgment of the General Court of 8 July 2008, *BPB v Commission*, T-53/03, ECLI:EU:T:2008:254, paragraph 257 and judgment of the General Court of 28 April 2010, *Amann & Söhne and Cousin Filterie* v *Commission*, T-446/05, ECLI:EU:T:2010:165, paragraph 89.

710 ID […][…].

711 ID […][…].

Commission is entitled to impute responsibility for those actions on the basis of participation in the infringement considered as a whole[712].

(382) The Commission notes that whereas the collusive contacts took place mainly in relation to specific bidding events, these recurrent bid-specific contacts are merely a manifestation of an overall cartel scheme. While the separate tenders may have varied in terms of bidding techniques used or in terms of specific type of ODDs subject to procurement, these factors do not exclude a common plan and ultimately finding of a single and continuous infringement in this case. In fact, what is decisive is rather the overall conduct on the part of the ODD suppliers and the collusive aim pursued by them (see recital (355)). The numerous individual tenders over the cartel period were used as vehicles for the realisation of that aim.

(383) In this case, the fact that the evidence of the conduct concerns primarily two distinct customers cannot invalidate or otherwise alter the finding of a single and continuous infringement[713]. First, while the collusion centered principally on the bidding events organised by Dell and HP, it also went beyond specific tenders. More specifically, some of the issues subject to the collusion were not tender specific, e.g. responsibility for costs of air freight applied on ODD shipments, issue of cost adders applied to certain ODD types, namely Slim and Half Height or qualification status, pull–out rates and production capacity[714]. Hence, the collusion overall reduced artificially uncertainty concerning the future behaviour of market players in the ODD industry in general. Moreover, knowing competitor's information for one customer aided the parties in tailoring their strategy for the other customer too. This has been confirmed also by […][715] submitting that *"[...]"*. Furthermore and irrespective of whether the individual collusive contacts related to Dell, HP or otherwise, they concerned the same product[716], had a similar content, were applied throughout the cartel period, involved largely the same parties[717], had a […]and pursued the same objective, to distort the normal operation of competition for ODD procurement for Dell and HP[718]. Such elements clearly display a link of complementarity between

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712 Judgment of the Court of Justice of 6 December 2012, *Commission v Verhuizingen Coppens NV*, C-441/11 P, ECLI:EU:C:2012:778**,** paragraph 41.

713 Such distinction between two customer accounts (Dell and HP) and parties' cartel involvement with respect to only one or to both customers becomes relevant only at the stage of determining the relevant value of sales for the fining purposes.

714 ID […]; ID […]; ID […].

715 ID […].

716 While the specifications of the products may have differed based on the customer's requirements, it has been confirmed by parties themselves that ODDs for computers can be defined as pertaining to the same product market - see Commission Decision in Case No COMP/M.3349 – Toshiba/Samsung/JV dated 2 March 2004, paragraph 7 for more details. Furthermore, […] ID […] the products were largely the same for all customer accounts.

717 Since each of the parties contributed to the pursuit of the common objective at its own level, depending on the market position and business aspirations, intensity and duration of involvement of individual parties may have varied over time. This, however cannot alter the finding of overall anticompetitive plan.

718 See to this effect judgment of the General Court of 12 July 2011, *Toshiba Corp. v Commission*, T-113/07, ECLI:EU:T:2011:343, paragraph 228 and judgment of the General Court of 16 September 2013, *Masco Corp. v Commission*, T-378/10, ECLI:EU:T:2013:469, paragraph 22, 60. See also judgment of the Court of Justice of 19 December 2013, *Siemens AG, Mitsubishi Electric Corp., Toshiba Corp., v Commission*, C-239/11 P, C-489/11 P and C-498/11 P, ECLI:EU:C:2013:866, paragraph 247; Judgment of the General Court of 12 December 2007, *BASF AG and UCB v Commission*, T-101/05 and T-111/05, ECLI:EU:T:2007:380 paragraph 181.

various collusive actions outlined in this Decision and represent objective indicia of an overall plan put into effect by a uniform group of undertakings[719].

(384) Regarding the alleged separate customer-specific teams at the ODD supplier managing the procurement, according to the case law, the identity of the individuals involved on behalf of undertakings is only one of the aspects taken into account[720] when assessing the link between individual cartel manifestations but not a decisive one[721]. The fact that there may have been separate teams managing procurement for individual customer accounts is an aspect purely internal to the undertaking concerned and it does not preclude the finding of a single and continuous infringement. Furthermore, as explained in recital (412), some of the individuals involved in the cartel supervised or were otherwise engaged in a business relationship with both Dell and HP.

(385) Hence, the fact that the distinct instances of collusive contacts in this case on their own had an anticompetitive object or that they may have concerned one or the other customer does not alter the Commission's conclusion that all the arrangements as a whole constituted a common anticompetitive plan and formed a single and continuous infringement. Pursuant to the case law[722], a series of efforts, which have an identical anticompetitive object, may form a single and continuous infringement, even though separate acts in isolation may also constitute an infringement.

(386) Furthermore, TSST maintains[723] that circumstances capable of casting doubt on the finding of a single and continuous infringement exist, while referring to the *BASF* case law[724]. More specifically, TSST contends that there is no indication of an overall coordination[725], that there is no complete overlap in respect of the parties allegedly involved in the contacts concerning, respectively Dell and HP and that the Dell-related and the HP-related contacts did not take place during the same period of time.

(387) First, the case law invoked by TSST calls for assessment of circumstances such as period of application of the practices, their content and objective in order to determine whether the various manifestations of a cartel conduct indeed constitute single and continuous infringement. The Commission observes that none of the points raised by TSST are liable to affect that assessment. In this case, a unity of conduct in terms of content (the contacts regarding Dell and HP had the same nature

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719 Judgment of the General Court of 16 September 2013, *Masco Corp. v Commission*, T-378/10, ECLI:EU:T:2013:469, paragraph 23 and judgment of the General Court of 17 December 2014, *Pilkington Group and Others v Commission*, T-72/09, ECLI:EU:T:2014:1094, paragraph 125.

720 Judgment of the General Court of 8 July 2008, *BPB v Commission*, T-53/03, ECLI:EU:T:2008:254, paragraph 257; Judgment of the General Court of 12 December 2012, *Almamet GmbH Handel mit Spänen und Pulvern aus Metall v Commission*, T-410/09, ECLI:EU:T:2012:676, paragraph 174; Judgment of the General Court of 27 February 2014, *InnoLux v Commission*, T-91/11, ECLI:EU:T:2014:92, paragraph 128 and judgment of the General Court of 17 May 2013, *Manuli Rubber Industries SpA (MRI) v Commission*, T-154/09, ECLI:EU:T:2013:260, paragraph 194.

721 Judgment of the General Court of 28 April 2010, *Amann & Söhne and Cousin Filterie* v *Commission*, T-446/05, ECLI:EU:T:2010:165, paragraph 108.

722 See judgment of the General Court of 5 April 2006, *Degussa AG v. Commission*, T-279/02, ECLI:EU:T:2006:103, paragraph 155.

723 ID […][…].

724 Judgment of the General Court of 12 December 2007, *BASF AG and UCB v Commission*, T-101/05 and T-111/05, ECLI:EU:T:2007:380, paragraph 181.

725 TSST seems to argue that the present case concerns simultaneous, albeit unrelated practices.

and followed the same pattern), objective and largely also period of application (substantial overlap of almost 3 years between HP- and Dell-related contacts out of the overall cartel duration of less than 4.5 years) and cartel participants (five out of eight undertakings were involved in both Dell- and HP-related contacts) is established as demonstrated by the facts set out in Section 4. Furthermore, the case-law does not prescribe as a criterion of the unicity of the infringement the fact that the duration of all the practices covered by the this Decision (thus Dell-related and HP-related) is the same[726] nor that there is a complete overlap in respect of the parties involved in the various contacts[727].

(388) TSST argues[728] that it is not clear what the underlying plan is, how it was agreed and communicated and further elaborates that there is not a single document pointing to the intention of ODD suppliers to set out rules or plan of actions in relation to multiple events, let alone for all procurement events throughout the relevant period. In the same vein, Sony/Optiarc[729] argues that there is no evidence of any framework agreement (or other overarching arrangement) in this case, under which ODD suppliers had a common strategy and coordinated and consolidated separate anti-competitive actions. Furthermore, TSST appears to argue[730] that the Commission has only vaguely defined "anticompetitive goal" and more specifically, that it only makes a general reference to a goal of restricting competition which TSST deems insufficient[731].

(389) The Commission notes that the abovementioned links of complementarity (recital (383)) between the various forms of conduct constitute objective evidence of the existence of a global plan[732]. There is no requirement for such a plan to be formally spelled out[733]. Hence, while in this case there is no written evidence showing the parties putting explicitly in place any specific rules or action plans or any framework agreement covering any or all of the collusive contacts subject to this Decision (which would in any event be highly unlikely given the clandestine nature of cartels), this does not and cannot detract from the Commission's finding of a single and continuous infringement. The Commission observes that the details of the underlying plan common to the parties' behaviour are clearly outlined in Section 5.4.3.2 and that it clearly goes beyond making a vague, general reference to the goal of restricting competition in defining the single anticompetitive economic aim. As was already clearly explained in the SO (paragraphs 317 and 319), the cartel participants aimed at interfering with the normal operation of the competition for ODD procurement for Dell and HP regarding the defining parameters, such as price and volume.

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726 Judgment of the General Court of 13 September 2013, *Total Raffinage Marketing v Commission*, T-566/08, ECLI:EU:T:2013:423, paragraph 308.

727 Judgment of the General Court of 13 September 2013, *Total Raffinage Marketing v Commission*, T-566/08, ECLI:EU:T:2013:423, paragraph 266.

728 ID […][…].

729 ID […][…].

730 ID […][…].

731 TSST refers to the judgment of the General Court of 12 December 2007, *BASF AG and UCB v Commission*, T-101/05 and T-111/05, ECLI:EU:T:2007:380, paragraph 180.

732 Judgment of the General Court of 17 December 2014, *Pilkington Group and Others v Commission*, T-72/09, ECLI:EU:T:2014:1094, paragraph 125.

733 Judgment of the General Court of 16 September 2013, *Keramag Keramische Werke and Others v Commission*, T-379/10 and T-381/10, ECLI:EU:T:2013:457, paragraph 77.

(390) According to TSST[734], the documentary evidence relied upon by the Commission is episodic, invariably event-specific and consistently about bilateral, not multilateral conduct and does not support a finding of multilateral strategy.

(391) The argument of TSST is irrelevant, as it is immaterial for the purposes of establishing a single and continuous infringement whether the conduct under scrutiny is bilateral, multilateral, general or event-specific. By contrast, what is instrumental is that different actions form part of an 'overall plan' distorting competition within the common market[735].

Pattern of the cartel contacts

(392) Sony/Optiarc claims[736] that there is no pattern in the anticompetitive contacts – some concerned the prices or ranks established in the previous negotiations, others concerned pull rates, others concerned QBR scores, others concerned quality issues or supply constraints – with no underlying connection.

(393) The Commission notes that while the type and nature of information subject to various cartel contacts might have differed, this does not have any material impact on finding a consistent behavioural pattern and illegality of the behaviour. The consistent pattern, indicative of the existence of a single and continuous infringement, is demonstrated principally by the fact that a number of specific topics was repeatedly discussed over the cartel period (collusion on ranking intentions, price levels as well as exchanges of other commercially sensitive information). Furthermore, the collusive contacts (i) took place in the same or similar manner over a long period, (ii) involved the same individuals (or their successors as the case may be) engaged by largely the same undertakings and (iii) followed the same or similar pattern in terms of timing (mainly prior, during and after bidding events) and means of communication (mainly telephone calls, on some occasions summarized in internal communications), while pursuing a single anticompetitive aim.

Pursuit of a common objective

(394) Sony/Optiarc argues[737] that it did not act in pursuit of a single aim shared with competitors or did not consciously contribute to any such single aim. Sony/Optiarc maintains that, to the contrary, the evidence shows that its strategy involved obtaining whatever competitive advantage it could, that its communications were far less extensive than those of others and that in many instances Sony/Optiarc's account managers refused to provide information. Furthermore, Sony/Optiarc argues[738] that unlike other ODD suppliers, there is no evidence that it participated in the systematic sharing of information regarding future intentions.

(395) Quanta also argues[739] that while contribution to the common plan necessarily implies some form of positive action, Quanta had very infrequent contacts with limited

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734 ID […][…].

735 Judgment of the General Court of 24 March 2011, *Aalberts Industries NV and Others v Commission*, T-385/06, ECLI:EU:T:2011:114, paragraph 87; Judgment of the Court of Justice of 19 December 2013, *Siemens AG, Mitsubishi Electric Corp., Toshiba Corp., v Commission*, C-239/11 P, C-489/11 P and C-498/11 P, ECLI:EU:C:2013:866, paragraph 248.

736 ID […][…].

737 ID […][…].

738 ID […][…].

739 ID […][…].

number of other parties, which were never instigated by Quanta itself. Furthermore, Quanta claims that above all, the undertaking distanced itself from procurement events, which according to the Commission were subject to an overall plan, by virtue of Quanta's position as an upstream supplier to Sony who had full and final authority in all bidding events.

(396) As set out in Section 5.4.3, although a cartel is a joint enterprise, each participant in the cartel may play its own particular role. The mere fact that each undertaking takes part in the infringement in ways particular to it does not imply that the undertaking did not contribute to the realisation of the common anticompetitive objective and does not suffice to exclude its liability for the entire infringement[740].

(397) Furthermore, the fact that the parties may have had subjective intentions undoubtedly does not justify their participation in collusive arrangements. According to settled case-law, collusive arrangements can be restrictive by object even if the parties had other motives or pursued their own interests. An undertaking which despite colluding with its competitors follows a more or less independent policy on the market may simply be trying to exploit the cartel for its own benefit[741]. Hence, Sony/Optiarc's argument that it sought to obtain whatever competitive advantage it could from the collusive contacts implies that the undertaking was simply trying to exploit the cartel for its own benefit, but in legal terms can in no way be indicative of lacking contribution to a single aim of the cartel.

(398) Moreover, under the settled case-law, a party which even tacitly approves of an unlawful initiative, without publicly distancing itself from its content or reporting it to the administrative authorities, effectively encourages the continuation of the infringement. That complicity constitutes a mode of participation in the infringement, a form of contribution to the common objective and is capable of rendering the undertaking liable[742]. Hence, unlike Sony/Optiarc and Quanta suggest, no positive action or instigation is required in order to find an undertaking liable for an infringement.

(399) In this case, the parties have neither publicly dissociated themselves from the collusive discussions, nor have they notified the relevant authorities about the unlawful conduct. Furthermore, even if some of the parties had played only a passive role in some aspects of the infringement or some specific cartel contacts in which they were implicated or even if they were not involved in systematic or frequent collusion or occasionally refused to provide commercially sensitive information, this would not exclude establishment of an infringement on their part[743]. According to the settled case law, the mere fact of receiving information concerning competitors, which an independent operator preserves as business secrets, is sufficient to

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740 See judgment of the General Court of 6 March 2012, *UPM-Kymmene Oyj v Commission*, T-53/06, ECLI:EU:T:2012:101, paragraph 62.

741 See, to that effect judgment of the General Court of 27 September 2006, *Archer Daniels Midland Co v Commission*, T-59/02, ECLI:EU:T:2006:272, paragraph 189.

742 See, to that effect judgment of the Court of Justice of 7 January 2004, *Aalborg Portland A/S and Others v Commission*, C-204/00P, C-205/00P, C-211/00P, C-213/00P, C-217/00P and C-219/00P, ECLI:EU:C:2004:6, paragraph 84.

743 Judgment of the Court of Justice of 7 January 2004, *Aalborg Portland A/S and Others v Commission*, C-204/00P, C-205/00P, C-211/00P, C-213/00P, C-217/00P and C-219/00P, ECLI:EU:C:2004:6, paragraph 86.

demonstrate the existence of an anti-competitive intention[744] and a concerted practice can be found, even where the disclosure by one competitor to another of its future intentions or conduct on the market was requested or, at the very least, accepted by the latter[745].

(400) While in this case the intensity and frequency of participation of the individual parties may have varied, this is not indicative of a lack of pursuit of a common objective, but rather of the characteristics of the market concerned, the position of each undertaking on that market and the aims the undertakings individually pursued[746].

(401) As to Quanta's argument that it was in the position of an upstream supplier to Sony Optiarc, it clearly follows from the facts set out in Section 4 (see in particular recitals (216)-(217), (223), (225), (248)-(251)) that Quanta took part in a single and continuous infringement by its own contribution to the overall plan described in this Decision. The evidence demonstrates that notwithstanding the existence of supplier-customer relationship, Quanta was directly involved in the anticompetitive behaviour subject to this Decision and had a commercial interest in the collusion. Even when operating as a manufacturer for another entity, Quanta was clearly involved in setting the price at which ODDs were sold to Dell or HP respectively by Quanta's contract partner and equally had a commercial interest in the price-setting, since […][747]. In any event, the existence of a commercial interest is not required in order to prove Quanta's participation in the infringement[748].

(402) Having regard to the recitals (396)-(401), as well as to Section 4, the Commission has demonstrated to the requisite legal standard that each of the parties addressed in this Decision, including Sony, Sony Optiarc and Quanta, contributed, at their own level, to the pursuit of the common anticompetitive objective and participated in the single and continuous ODD infringement.

Authorisation to commit to a common plan

(403) Sony/Optiarc submits[749] that its employees involved in contacts with competitors were account managers who had no role in or responsibility for setting company strategy, much less committing the company to agree to any common purpose or strategy.

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744 Judgment of the General Court of 12 July 2001, *Tate & Lyle plc, British Sugar plc and Napier Brown & Co. Ltd v Commission*, T-202/98, T-204/98 and T-207/98, ECLI:EU:T:2001:185, paragraph 66 and judgment of the General Court of 8 July 2008, *BPB v Commission*, T-53/03, ECLI:EU:T:2008:254, paragraph 154.

745 Judgment of the General Court of 2 February 2012, *Denki Kagaku Kogyo Kabushiki Kaisha v Commission*, T-83/08, ECLI:EU:T:2012:48, paragraph 67 **(**See also, to that effect, judgment of the General Court of 8 July 2008, *BPB v Commission*, T-53/03, ECLI:EU:T:2008:254, paragraphs 153 and 182 and the case-law cited therein).

746 Judgment of the General Court of 12 July 2011, *Hitachi Ltd and Others v Commission*, T-112/07,ECLI:EU:T:2011:342, paragraph 287.

747 Quanta states in its […] (ID […]) that "[…]". See also ID […][…], ID […]; ID […] and ID […].

748 It is a settled case law that the Commission is not obliged to show that an undertaking has a commercial interest in a collusion, provided that the concertation on part of the undertaking is proven - see judgment of the Court of Justice of 25 January 2007, *Sumitomo Metal Industries Ltd, and Nippon Steel Corp. v Commission*, C-403/04 P and C-405/04 P, ECLI:EU:C:2007:52, paragraphs 44 and 46.

749 ID […][…].

(404) The Commission notes that no specific authorisation or approval is required by an employer to its representative to conclude cartel agreements[750]- it suffices that the representative is authorised to act for the product or service in question. It is settled case-law, that in order to be found guilty of an infringement, it is not necessary for there to have been action by, or even knowledge on the part of the partners or principal managers of the undertaking concerned; action by a person who is authorized to act on behalf of the undertaking suffices[751].

(405) The fact that account managers of Sony and Sony Optiarc were involved in the infringement therefore does not affect the Commission finding of the subscription of Sony and Sony Optiarc to the common anticompetitive plan and purpose. Moreover, the evidence shows that the account managers for Sony and Sony Optiarc also reported to the senior management (such as, in particular […], acting in the position of a […] throughout the period of the cartel) on the collusive discussions and their outcome[752].

(406) Even if the matters discussed with the competitors were outside the scope of the account managers' responsibilities (which is not the case), the mere involvement, lack of dissociation and presumed ability to communicate internally the outcome of the coordination would have led the other cartel participants to believe that Sony and Sony Optiarc subscribed to the common plan and would comply with it[753].

Market characteristics and finding of a single and continuous infringement

(407) Sony/Optiarc argues[754] that the characteristics of the relevant product markets are inconsistent with a finding of a single and continuous infringement. More specifically, according to Sony/Optiarc, ODDs are heterogeneous products with different characteristics, are priced differently, are at any given time at different points in their lifecycle, are subject to different conditions of demand and supply and also are, in most cases, the subject of separate and unrelated tenders.

(408) It is a settled case law that characterisation as a single infringement concerns agreements or concerted practices which could be regarded as infringements of Article 101 of the TFEU in relation to a specific product or a particular geographic area but which the Commission – because they form part of an overall plan – considers as a whole[755].

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750 Judgment of the General Court of 16 November 2011, *Álvarez v Commission*, T-78/06, ECLI:EU:T:2011:673, paragraph 39.

751 Judgment of the Court of Justice of 7 June 1983, *SA Musique Diffusion Française and others v Commission*, 100-103/80, ECLI:EU:C:1983:158, paragraph 97. See also judgment of the General Court of 20 March 2002, *HFB Holding für Fernwärmetechnik Beteiligungsgesellschaft mbH & Co. KG and others v Commission*, T-9/99, ECLI:EU:T:2002:70, paragraph 275; Judgment of the General Court of 20 March 2002, *Brugg Rohrsysteme GmbH v Commission*, T-15/99, ECLI:EU:T:2002:71, paragraph 58; Judgment of the General Court of 29 April 2004, *Tokai Carbon GmbH and others v Commission*, T-236/01, ECLI:EU:T:2004:118, paragraph 277.

752 E.g. ID […]; ID […]; ID […]; ID […]; ID […].

753 Judgment of the Court of Justice of 7 January 2004, *Aalborg Portland and Others v Commission*, C-204/00 P, C-205/00P, C-211/00P, C-213/00P, C-217/00P and C-219/00P, ECLI:EU:C:2004:6,, paragraph 82.

754 ID […][…].

755 Judgment of the General Court of 16 September 2013, *Keramag Keramische Werke AG v Commission*, T-379/10 and T-381/10, ECLI:EU:T:2013:457, paragraph 73.

(409) While the specifications of the ODD products may have differed based on the customer's requirements, it has been confirmed by parties themselves and by the Commission's merger practice that ODDs for computers can be defined as pertaining to the same product market[756]. Nevertheless, it is immaterial if each specific type of ODD belonged to a separate relevant market. According to the case-law, a single infringement does not necessarily have to relate to one product or to substitutable products. Other criteria are also relevant in that regard, such as whether the objectives of the practices at issue are the same or different, whether the undertakings which participated in them are the same, whether the detailed rules for the implementation of those practices are the same, whether the natural persons involved on behalf of the undertakings are the same and whether the geographical scope of the practices at issue is the same[757]. In this case the collusive practices described in this Decision constitute a single and continuous infringement, given that, irrespective of the specific type of ODD concerned, they had the same object, the same subjects, the same geographic market and the same individuals involved[758]. It is the participants' conduct which defines the scope and nature of a cartel and the Commission is not required to define in a cartel case the relevant product market in the same manner as it is in a merger procedure or when assessing an abuse of dominant position[759].

(410) Furthermore, the factors set out in recital (383) demonstrate the presence of close synergies enabling the Commission to establish that the cartel arrangements relating to individual ODD types are complementary and contribute, through their interaction, to bringing about the set of anti-competitive effects sought by the parties. It is exactly the set of anti-competitive effects sought by the parties which constitutes the overall plan[760] and is material for the purpose of finding a single and continuous infringement.

(411) According to Sony/Optiarc [761] it has not been clarified how the contacts alleged for Sony and Sony Optiarc could have affected other procurements or products that were not subject of allegations. Sony/Optiarc also submits[762] that HP and Dell purchased many different types of ODD, and for some of those ODDs the Commission alleges no contacts at all involving Sony or Sony Optiarc. Hence, Sony/Optiarc argues that the allegations are insufficient to establish a continuous infringement covering all ODD sales throughout the cartel period. TSST argues[763] that the Commission has not

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756 See Commission Decision in Case No COMP/M.3349 – Toshiba/Samsung/JV dated 2 March 2004, paragraph 7 for more details. Furthermore, […] (ID […]) […] the products were largely the same for all customer accounts.

757 Judgment of the General Court of 27 February 2014, *InnoLux Corp. v Commission*, T-91/11, ECLI:EU:T:2014:92, paragraph 128; Judgment of the General Court of 13 September 2013, *Total Raffinage Marketing v Commission*, T-566/08, ECLI:EU:T:2013:423, paragraph 271.

758 Judgment of the General Court of 16 June 2015, *FSL and Others v Commission*, T-655/11, ECLI:EU:T:2015:383, paragraphs 479 and 491.

759 Judgment of the General Court of 21 February 1995, *SPO and Others v Commission*, T-29/92, ECLI:EU:T:1995:34, paragraph 74 and judgment of the General Court of 15 March 2000, *Cimenteries CBR and Others v Commission*, T-25/95 etc., ECLI:EU:T:2000:77, paragraph 1093.

760 Judgment of the General Court of 16 September 2013, *Keramag Keramische Werke AG v Commission*, T-379/10 and T-381/10, ECLI:EU:T:2013:457, paragraph 77.

761 ID […][…].

762 ID […][…].

763 ID […][…].

indicated that the addressees, when contacting each other to determine the strategy in relation to a certain bid, consistently took into account other bids, in an effort to pursue a common plan encompassing past and future events.

(412) The Commission observes with reference to Section 4 that there is an undeniable and logical link between separate tenders during the cartel period. The outcome of a particular tender has an inevitable impact on behaviour and position adopted by the ODD supplier in subsequent tenders, be it in relation to price, ranking, volumes as well as overall strategy pursued on the market. Furthermore, although the individual tenders related mainly to specific types of ODD products, they were used only as vehicles for realisation of the overall collusive aim. In fact, the ODD cartel had wider ramifications going beyond individual tenders and some of the collusive arrangements were also more general in nature (e.g. exchanges on qualification status, pull out rates, production capacity) and not specific to certain ODD types (see Section 4 and recital (383)). Furthermore, […], some of the individuals involved in the cartel supervised or were otherwise engaged in a business relationship with both Dell and HP[764], which further confirms the scope of the collusion going beyond specific tenders or types of ODD. Therefore, the cartel subject to the present investigation covers all ODDs supplied to Dell and HP respectively by the cartel members during the material period.

(413) Moreover, cartels are by their very nature secret and hence it is inevitable that some evidence showing certain manifestations of anti-competitive practices remains undiscovered[765]. In this case, especially where cartel contacts were solely oral, it would indeed be impossible to find evidence in relation to each of the ODD types, which in any event is not incumbent on the Commission[766]. Hence, the Commission is in no way bound to prove that collusion existed with respect to each and every specific procurement event and to each and every type of the ODDs supplied to Dell and HP respectively throughout the cartel period, provided that it proves to the requisite legal standard the existence of single and continuous ODD infringement – a condition which is met in this case.

Awareness of the general scope and the essential characteristics of the cartel

(414) TSST argues[767] that its awareness of the alleged single and continuous infringement and constituent elements thereof have not been proven to the requisite legal standard and therefore that there is no basis to impute to TSST liability for such infringement. Quanta also rejects[768] the Commission's allegation that Quanta was aware or ought to have been aware, of the existence of an overall plan by ODD suppliers to distort competition.

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764 E.g. […], […], […], […] for the immunity applicant; […], […] and […] for HLDS; […] for Sony and Sony Optiarc and […] for Quanta.

765 See judgment of the General Court of 16 June 2011, *Team Relocations NV v Commission*, T-204/08 and T-212/08, ECLI:EU:T:2011:286, paragraph 65 (judgment upheld by the Court of Justice in case C-444/11P).

766 See, to that effect judgment of the General Court of 16 June 2011, *Team Relocations NV v Commission*, T-204/08 and T-212/08, ECLI:EU:T:2011:286, paragraphs 62, 64-65 and 72 (judgment upheld by the Court of Justice in case C-444/11P).

767 ID […][…].

768 ID […][…].

(415) According to the established case law, it is only if the undertaking knew or should have known when it participated in the collusion that in doing so it was joining in the global cartel that its participation in the collusion concerned can constitute the expression of its accession to that global cartel[769].

(416) The Commission notes that in this case, the territorial ([…] EEA-wide) and product scope (ODD), as well as the nature and the objective of the collusive practices remained the same over the entire cartel duration. The ODD cartel coordination was manifested (i) on numerous occasions in connection with or outside of the bidding framework and (ii) between the parties acting in various constellations, while each of the parties took part at least in several of those manifestations. Hence, by taking part in multiple collusive events (as opposed to participation in an isolated cartel incident) of the same nature, objective, territorial and product scope and with different parties, the parties undeniably knew or must have known that they were acceding a wider scheme and effectively joining the global ODD cartel [770]. Even if some of the parties participated in the infringement in ways particular to them, they took part in an identical conduct as the other undertakings, united by an identical form of infringement consisting in coordination aimed at optimal ODD volumes for the parties at price levels higher than they would have been in the absence of the collusion.

(417) Sony/Optiarc appears to argue[771] that since it did not enter into any outright bid-rigging agreements and it was not aware of, them, it did not participate in the continuous infringement alleged by the Commission.

(418) The Commission notes that the single and continuous ODD infringement does not only consist of outright bid-rigging agreements, but also of concerted practices and exchanges of information, implementing, enabling or facilitating cartel arrangements[772]. As explained in recital (348), for an undertaking to be held liable for the overall cartel, it is not necessary that it participated in all the constituent elements of the cartel. Sony and Sony Optiarc can therefore even be held liable for the single and continuous infringement (subject to the limitations set out in recitals (372) and (375)) without having participated in outright bid-rigging agreements.

(419) TSST submits[773]that there is no evidence on the file demonstrating that TSST engaged in bilateral contacts with Sony or Quanta or that it was or should have been aware of bilateral communications involving the said undertakings. Essentially, TSST argues[774] that the documents cited in the SO at most show that TSST allegedly had separate and independent contacts with PLDS and with HLDS, while it did not receive or seek to receive from PLDS or HLDS information about other ODD

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769 See judgment of the General Court of 16 June 2011, *Verhuizingen Coppens NV v Commission*, T-210/08, ECLI:EU:T:2011:288, paragraph 30 and judgment of the General Court of 20 March 2002, *Sigma Tecnologie* v *Commission*, T-28/99, ECLI:EU:T:2002:76, paragraph 45.

770 Judgment of the General Court of 20 March 2002, *Sigma Tecnologie* v *Commission*, T-28/99, ECLI:EU:T:2002:76, paragraph 45.

771 ID […][…].

772 See, for example, judgment of the General Court of 15 March 2000, *Cimenteries CBR and Others v Commission*, T-25/95 etc., ECLI:EU:T:2000:77, paragraph 4142.

773 ID […][…].

774 ID […][…].

suppliers or their parallel contacts and that this is not sufficient to prove awareness of the broader infringement.

(420) In the same vein, Sony/Optiarc submits[775] that it was not aware (nor should have been) of the collusive arrangements between TSST, HLDS and PLDS or even of the general scope and the essential characteristics of these arrangements. According to Sony/Optiarc, while the leniency applicants acknowledge their awareness of the other cartel members pursuing the same purpose and following the same strategy and modus operandi, the applicants do not suggest that they disclosed any information about the frequency or nature of their contacts with other ODD suppliers to Sony or Sony Optiarc. Similarly, Quanta claims[776] that the Commission fails to show that Quanta was aware of the other members of the cartel, of the existence of parallel bilateral contacts and of the dynamics and functioning of the network.

(421) It is a settled case law that the Commission is entitled to attribute to an undertaking liability only for the conduct in which it had participated directly and for the conduct planned or put into effect by the other cartel participants, in pursuit of the same objectives as those pursued by the undertaking itself, where it has been shown that the undertaking was aware of that conduct or was able reasonably to foresee it and prepared to take the risk[777]. Thus, the finding that the parties participated in a single and continuous infringement does not require it to be shown that they participated in all collusive arrangements covering the same product, in this case ODDs[778]**.** In addition, even the fact that the individual parties are not familiar with the details of some collusive contacts taking place between various pairs of the cartel participants in which they did not participate or the fact that they were unaware of the existence of some of such contacts, cannot detract from the Commission's finding that they participated in the cartel as a whole[779].

(422) In this case, it is undisputed that the majority of contacts took place at a bilateral level and consequently that the individual parties did not take part directly in all the contacts covered by this Decision. However, the lack of direct participation for certain contacts can be attributed also to their limited participation in procurement events and/or limited business operations, hence to reasons unrelated to the cartel. For illustration (insofar as the rebuttal of Sony/Optiarc's argument is concerned), Sony/Optiarc submits that "[b]*ased on product samples provided by the selected suppliers, Dell or HP determined which suppliers it wished to "qualify" to participate in future negotiations. These suppliers varied from time to time, and from product to product. For example, in several auctions during the period of the alleged infringement, Dell or HP did not qualify Sony/Optiarc's product*". Furthermore (insofar as the rebuttal of Sony/Optiarc's argument is concerned), "*Sony/Optiarc identified 68 Dell procurement events in which it participated during the 2007 through 2009 time period* […] *We* [Sony] *estimate that Dell had more than 150*

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775 ID […][…].

776 ID […][…].

777 Judgment of the Court of Justice of 6 December 2012, *Commission v Verhuizingen Coppens NV*, C-441/11 P, ECLI:EU:C:2012:778, paragraph 44.

778 Judgment of the General Court of 6 March 2012, *UPM-Kymmene Oyj v Commission*, T-53/06, ECLI:EU:T:2012:101, paragraph 62.

779 See, to that effect, judgment of the General Court of 14 Dcember 2006, *Raiffeisen Zentralbank Österreich AG v Commission*, T-259/02 to T-264/02 and T-271/02, ECLI:EU:T:2006:396, paragraph 193.

procurement events during the relevant period."[780] Moreover, in many situations the parties did not necessarily have to engage in direct contacts with some of the other parties to remove or limit strategic uncertainty on the market as to their future behaviour[781], as they were concerned only by the closest competitor or competitors in order to achieve this goal or because competitors shared with them the information they obtained from the other competitors[782].

(423) In any event, the Commission maintains that for the period of their cartel participation, apart from the direct cartel contacts, the parties were aware or could have reasonably foreseen the offending conduct of the other participants, which occurred during that period. The awareness of all parties is established on the basis of a number of evidentiary pieces including corporate statements and contemporaneous evidence as well as indicia predating or coinciding with the infringement period, which taken together constitute body of consistent evidence meeting the requisite legal standard incumbent on the Commission (see recitals (361)-(379) for more details). Therefore, the arguments submitted by TSST, Sony/Optiarc and Quanta have to be rejected.

(424) TSST claims that the documents on the case file do not support the finding of awareness of TSST for the entire infringement period, in particular because they are dated to the period after the starting date of TSST's liability fixed by the Commission[783]. With respect to […], TSST argues[784] […]conduct that started in 2004. Quanta also submits[785] that it is for the Commission to establish, should it prove to the requisite legal standard that Quanta ought to have been aware of an overall conspiracy, at what point this became the case. Furthermore and in more general manner, the immunity applicants claim[786] that any references to evidence and materials in the Commission Decision should be restricted to evidence and materials relating to the period of the alleged infringement.

(425) The Commission considers that it is not precluded from using the elements of awareness dating from the period outside of the infringement in order to meet the awareness criterion to the requisite legal standard[787]. Furthermore, in line with the case law, while some of the facts relied on by the Commission occurred outside the infringement period, they none the less also form part of the body of evidence on which the Commission rightly relies in order to establish, among others, the awareness element for the entire infringement period[788].

(426) In light of the recital (425) as well as the recitals (363), (368), (376) and (377), at the time of implication in the first anticompetitive contact (as determined by the Commission in this Decision), TSST and Quanta were aware of the conduct planned or put into effect by the other undertakings in pursuit of the same single anti-

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780 ID […] ([…]).

781 See e.g. […] (ID […]): "[…]".

782 See recitals (117), (129) and (188).

783 ID […][…].

784 ID […][…].

785 ID […] ([…].

786 ID […].

787 Judgment of the General Court of 6 March 2012, *UPM-Kymmene Oyj v Commission*, T-53/06, ECLI:EU:T:2012:101, paragraphs 57 and 58.

788 Judgment of the General Court of 2 February 2012, *Denki Kagaku Kogyo Kabushiki Kaisha v Commission*, T-83/08, ECLI:EU:T:2012:48, paragraphs 188 and 193.

competitive aim or could have reasonably foreseen it and were prepared to take the risk.

(427) Furthermore, TSST submits[789] […].

(428) […][790] was later employed by TSST[791]. […][792]. There was therefore not only continuity on the personal, but also on the corporate level[793]. Moreover, as set out in recitals (363) and (376), there is also other evidence that demonstrates TSST's awareness to the requisite legal standard.

Continuous participation in the infringement

(429) According to Sony/Optiarc[794], the Commission fails to show that Sony or Sony Optiarc participated continuously in an infringement for the entire period alleged and that individual instances of infringing conduct were sufficiently proximate in time that the involvement of Sony and Sony Optiarc was truly "*continuous*" in nature. Sony and Sony Optiarc claim that their communications with competitors were ad hoc and sporadic and therefore in no way "*continuous*".

(430) The fact that during their respective infringement periods Sony or Sony Optiarc would not have participated in a number of cartel events has no bearing on the duration nor continuation of their participation in the infringement, in particular given that the undertakings did not distance themselves from the cartel in the manner required by the case-law[795] and that there are no indicia that tend to establish that they withdrew from the cartel or interrupted their participation in the infringement during a certain period. Although the period separating two manifestations of infringing conduct is a relevant criterion in order to establish the continuous nature of an infringement, the fact remains that the question whether or not that period is long enough to constitute an interruption of the infringement cannot be examined in the abstract. On the contrary, it needs to be assessed in the context of the functioning of the cartel in question[796]. In this case, the cartel extended over a number of years and, accordingly, a gap of several months between the various manifestations of that cartel, during which the parties did not distance themselves from it, is immaterial[797].

Nature of the addressees' conduct and their degree of involvement in the ODD cartel

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789 ID […].

790 […].

791 See ID […].

792 ID […]; ID [...].

793 This is without prejudice to the Commission qualification of corporate liability on part of TSST in the present case.

794 ID […][…].

795 Judgment of the Court of Justice of 7 January 2004, *Aalborg Portland A/S and Others v Commission*, C-204/00P, C-205/00P, C-211/00P, C-213/00P, C-217/00P and C-219/00P, ECLI:EU:C:2004:6, paragraphs 81-85.

796 See judgment of the General Court of 2 February 2012, *Denki Kagaku Kogyo Kabushiki Kaisha v Commission*, T-83/08, ECLI:EU:T:2012:48, paragraph 223 and judgment of the General Court of 19 May 2010, *IMI and Others* v *Commission*, T-18/05, ECLI:EU:T:2010:202, paragraph 89. See also judgment of the General Court of 16 June 2015, *FSL and Others v Commission*, T-655/11, ECLI:EU:T:2015:383, paragraph 497.

797 See judgment of the General Court of 2 February 2012, *Denki Kagaku Kogyo Kabushiki Kaisha v Commission*, T-83/08, ECLI:EU:T:2012:48, paragraph 224.

(431) Sony/Optiarc argues[798] that by alleging that all of the ODD suppliers engaged in the same conduct based on evidence that is particular to one or two ODD suppliers, the Commission has not satisfied its burden of identifying evidence sufficient to show a violation by Sony and Sony Optiarc.

(432) The Commission notes that its finding of a cartel infringement on the part of Sony and Sony Optiarc is based on specific, individualised evidence outlined in Section 4 which clearly demonstrates the involvement of Sony and later Sony Optiarc in the cartel over an extended period of time. While Sony and Sony Optiarc have not been involved in all cartel manifestations throughout the duration of the cartel, this does not mean that Sony or Sony Optiarc were implicated in a less serious violation of Article 101 (1) of the TFEU. All cartel manifestations present in this case, whether bid-specific or not, whether outright agreements or concerted practices constituted behaviour united by an identical anticompetitive aim and there is no legitimate reason for concluding that the infringement that Sony and Sony Optiarc participated in differed from that involving other parties. Furthermore, as outlined in recital (348), the mere fact that each participant in a cartel may play the role which is appropriate to its own specific circumstances does not exclude its responsibility for the infringement as a whole, including acts committed by other participants but sharing the same unlawful anti-competitive aim.

(433) Furthermore, Sony/Optiarc submits[799] that PLDS, HLDS and TSST appear to have formed an information exchange group in which Sony or Sony Optiarc never participated.

(434) The Commission observes that for the purposes of the this Decision, the anti-competitive scheme which is subject to the Commission's assessment covers also Sony and Sony Optiarc, whose participation was established to the requisite legal standard (see Section 4) and the conduct subject to the this Decision is not restricted to a possible cartel platform limited to three ODD suppliers. Even if Sony and Sony Optiarc did not participate in all exchanges involving PLDS, HLDS and/or TSST, it can be held liable for the single infringement (see Section 5.4.3.1).

5.4.4. Restriction of competition

5.4.4.1. Principles

(435) To come within the prohibition laid down in Articles 101(1) of the TFEU and Article 53 (1) of the EEA Agreement, an agreement, a decision by an association of undertakings or a concerted practice must have as its object or effect the prevention, restriction or distortion of competition in the internal market. Article 101(1) of the TFEU and Article 53 (1) of the EEA Agreement expressly include as restrictive of competition agreements and concerted practices which:[800]

(a) directly or indirectly fix selling prices or any other trading conditions;

(b) limit or control production, markets or technical development;

(c) share markets or sources of supply.

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798 ID […][…].

799 ID […][…].

800 The list is not exhaustive.

(436) It is apparent from the Court of Justice's case-law that certain types of coordination between undertakings reveal a sufficient degree of harm to competition that it may be found that there is no need to examine their effects.[801] That case-law arises from the fact that certain types of coordination between undertakings can be regarded, by their very nature, as being harmful to the proper functioning of normal competition.[802] Article 101 of the TFEU and Article 53 (1) of the EEA Agreement are intended to protect not only the interests of competitors or consumers, but also the structure of the market and thus competition as such.[803]

(437) According to settled case-law, for the purposes of applying Article 101(1) of the TFEU, it is sufficient, in order for an agreement or concerted practice to fall within its scope, that its object should be to restrict, prevent or distort competition, irrespective of its actual effects. Certain collusive behaviour is so likely to have negative effects, in particular on the price, quantity or quality of the goods and services, that it may be considered redundant, for the purposes of applying Article 101(1) of the TFEU, to prove that it has actual effects on the market.[804]

5.4.4.2. Application in this case

(438) In this case, the undertakings colluded on the bid rankings, volume allocations, offering prices, bidding strategies in general and exchanged other commercially sensitive and competitively significant information (see recital (305)). The object of the conduct of the parties was to restrict competition within the meaning of Article 101 of the TFEU and Article 53(1) of the EEA Agreement.

(439) Such conduct, by its very nature, restricts competition within the meaning of Article 101(1) of the TFEU and Article 53(1) of the EEA Agreement.

5.4.4.3. Arguments of the parties and assessment thereof by the Commission

(440) Sony/Optiarc argues[805] that the conduct alleged by the Commission did not have any appreciable impact on competition in view of the fact that there was an intense competition throughout the material period. In particular, Sony/Optiarc claims that on most Dell tenders, there were many rounds of bidding, prices fell consistently,

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801 Judgment of the Court of Justice of 11 September 2014, *Groupement des Cartes Bancaires v Commission*, C-67/13 P, ECLI:EU:C:2014:2204, paragraph 49; Judgment of the Court of Justice of 19 March 2015, *Dole Food and Dole Fresh Fruit Europe v Commission*, C-286/13 P, ECLI:EU:C:2015:184, paragraph 113.

802 Judgment of the Court of Justice of 13 July 1966, *Consten and Grundig* v *Commission*, 56/64 and 58/64 ECLI:EU:C:1966:41; Judgment of the Court of Justice of 15 October 2002, *Limburgse Vinyl Maatschappij and Others* v *Commission*, C-238/99 P, C-244/99 P, C-245/99 P, C-247/99 P, C-250/99 P to C-252/99 P and C-254/99 P, ECLI:EU:C:2002:582, paragraph 508; Judgment of the Court of Justice of 8 December 2011, *KME Germany and Others* v *Commission*, C-389/10 P, ECLI:EU:C:2011:816, paragraph 75; Judgment of the Court of Justice of 11 September 2014, *Groupement des Cartes Bancaires v Commission*, C-67/13 P, ECLI:EU:C:2014:2204, paragraph 50; Judgment of the Court of Justice of 19 March 2015, *Dole Food and Dole Fresh Fruit Europe v Commission*, C-286/13 P, ECLI:EU:C:2015:184, paragraph 114.

803 Judgment of the Court of Justice of 6 October 2009, *GlaxoSmithKline Services and Others* v *Commission and Others*, C-501/06 P, C-513/06 P, C-515/06 P and C-519/06 P, ECLI:EU:C:2009:610, paragraph 63.

804 Judgment of the Court of Justice of 11 September 2014, *Groupement des Cartes Bancaires v Commission*, C-67/13 P, ECLI:EU:C:2014:2204, paragraph 51; Judgment of the Court of Justice of 19 March 2015, *Dole Food and Dole Fresh Fruit Europe v Commission*, C-286/13 P, ECLI:EU:C:2015:184, paragraph 115.

805 ID […][…].

market shares fluctuated widely, the customers exerted considerable purchasing power and Sony and Sony Optiarc have been seen by other ODD suppliers as competitively aggressive and unpredictable. Furthermore, according to Sony/Optiarc, economic analysis shows no relationship between the alleged competitor communication and the price paid in connection with the procurement events. Similarly, TSST maintains[806] that market for ODDs has seen continued and often dramatic price drops in the last decade as a result of tremendous bargaining power applied by Dell and HP on the ODD suppliers. In the same vein, Quanta argues[807] that the market for ODDs is highly competitive, characterised by a significant degree of buyer power and downward pressure on prices.

(441) It is established case law that an agreement that may affect trade between Member States and that has an anti-competitive object constitutes, by its nature and independently of any concrete effect that it may have, an appreciable restriction on competition[808]. In this case, the collusive arrangements entered into by the parties had as object the distortion of the normal operation of competition for ODD procurement events organised by Dell and HP.

(442) Thus, having regard to the anti-competitive object of the ODD conduct and to the settled case-law on the subject-matter[809], the Commission is not required to demonstrate that the behaviour also produced anti-competitive effects on the market. Even if an absence of effects could be demonstrated by an analysis of the economic context of the anti-competitive conduct concerned, the anticompetitive object could not be justified[810]. The parties cannot legitimize their cartel involvement by claiming the presence of intense competition in the market. In the same vein, all the factors highlighted by Sony/Optiarc, Quanta and TSST relating to economic context in which ODD suppliers operate have no impact on the analysis of their conduct set forth in this Decision.

(443) Sony/Optiarc also claims[811] that none of its employees reached any agreement to fix prices, rig bids, or otherwise restrict competition on Dell bids and also maintains that there is no evidence of anyone from Sony or Sony Optiarc providing concrete, individualized data regarding its intentions as to price and quantity. Sony/Optiarc points out that vast majority of allegations against it involve evidence of communications regarding past results or other historical data and contacts involving general statements of intent in upcoming bids or negotiations without disclosure of specific future prices or quantities, while none of these contacts should according to Sony/Optiarc be viewed as anti-competitive and capable of appreciably reducing uncertainty on the market. As a result, Sony/Optiarc argues that the communications

806 ID […][…].

807 ID […][…].

808 Judgment of the Court of Justice of 13 December 2012, *Expedia Inc. v Autorité de la concurrence and Others*, C-226/11, ECLI:EU:C:2012:795, paragraph 37.

809 See in particular judgment of the General Court of 6 July 2000, *Volkswagen AG v Commission*, T-62/98, ECLI:EU:T:2000:180, paragraph 178 and judgment of the General Court of 25 October 2005, *Danone Group v Commission*, T-38/02, ECLI:EU:T:2005:367, paragraph 150. See also judgment of the General Court of 20 March 2002, *HFB Holding and Others v Commission*, T-9/99, ECLI:EU:T:2002:70, paragraph 217.

810 Judgment of the Court of Justice of 25 January 2007, *Sumitomo Metal Industries Ltd and Nippon Steel Corp. v Commission*, C-403/04 P and C-405/04 P, ECLI:EU:C:2007:52, paragraph 43.

811 ID […][…].

involving Sony and Sony Optiarc do not support the conclusion that they participated in the ODD cartel. Similarly, Quanta argues[812] that any information it may have exchanged with other ODD suppliers was of historic nature and/or provided by Dell or HP and could not reduce effective competition.

(444) The Commission notes that the behaviour subject to this Decision comprises a complex of agreements and concerted practices which, as demonstrated in Section 5.4.3.2 constitute a single and continuous infringement, in which, among others, Sony and Sony Optiarc participated. Even if Sony and Sony Optiarc were not involved in all anti-competitive contacts throughout the duration of the cartel, this does not mean that they were implicated in a less serious violation of Article 101 (1) of the TFEU. The Commission notes that all cartel manifestations set out in this Decision, whether bid-specific or not, whether outright agreements or concerted practices constituted behaviour united by an identical anticompetitive aim and that there is no legitimate reason for concluding that the cartel involving Sony or Sony Optiarc differed from that involving the other parties.

(445) Regarding the involvement of Sony and Sony Optiarc, as described in Section 4 (in particular recitals (166)-(194) and (206)-(259)) they took part in numerous cartel manifestations over an extended period of time (August 2004-September 2006 and July 2007-October 2008 respectively). […][813]. The Commission notes that each and every instance of collusion involving Sony and Sony Optiarc, respectively, constituted part of the complex of agreement and concerted practices and concerned data deemed strategic (be it future pricing or ranking intentions, indications of aggressiveness, qualification or pull status or auction results) [814]. Sony and Sony Optiarc were hence involved in collusion which ultimately reduced strategic uncertainty, reducing the independence of parties' conduct on the market and diminishing their incentives to compete[815]. Pursuant to settled case law, an exchange of information between competitors is tainted with an anti-competitive object if the exchange is capable of removing uncertainties concerning the intended conduct of the participating undertakings[816].

(446) Furthermore, the requirement of independence, that is also applicable to the parties to this case precludes any direct or indirect contact between them by which an undertaking influences the conduct on the market of its competitors or discloses to them its decisions or deliberations concerning its own conduct on the market if, as a result, conditions of competition may apply which do not correspond to the normal conditions of the market in question. That applies all the more when the exchange of information concerns a highly concentrated oligopolistic market[817] such as the ODD

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812 ID […][…].

813 ID […]

814 For illustration, strategic importance of the actual price can be demonstrated […] (ID […]) […]. Furthermore, strategic usefulness of qualification status clearly transpires […] (ID […]): […]. See also recital (336) for further references to documents attesting to competitive significance of the information subject to competitor arrangements.

815 See Guidelines on the Applicability of Article 101 of the Treaty on the Functioning of the European Union on Horizontal Co-operation Agreements ("*Horizontal Guidelines*") (2011/C 11/01), para. 61.

816 Judgment of the Court of Justice of 4 June 2009, *T-Mobile Netherlands BV and others v Raad van bestuur van de Nederlandse Mededingings-autoriteit*, C-8/08, ECLI:EU:C:2009:343, paragraph 43.

817 Opinion of AG Kokott delivered on 19 February 2009 in Case C-8/08 *T-Mobile Netherlands BV and Others*, paragraph 52-53.

market[818]. The aforesaid conclusion even further reinforces the Commission finding of a restriction of competition by object in this case and involvement of Sony and Sony Optiarc therein.

(447) Moreover, the Commission maintains that in the context of the ODD cartel, in view of the high frequency of the auction data exchange over an extended period of time and aggregation of the data with other strategic information shared between ODD suppliers (for example qualification status, pull rates and future intentions) the competitor contacts relating to the auction results cannot be deemed 'historic' under the Guidelines on the Applicability of Article 101 TFEU on Horizontal Co-operation Agreements ("Horizontal Guidelines")[819]. The fact that the data in question reflects actual or past policy rather than future intentions does not deprive such data of competitive significance in this case and therefore does not preclude the Commission from concluding that sharing of auction results poses risks to competition. In fact, the auction results have the nature of a business secret[820] and not only are they not public, they also have an inevitable impact on behaviour and position adopted by the ODD suppliers in subsequent tenders as well as on overall strategy pursued on the market. Moreover, in this case the auction results were shared among ODD suppliers frequently and systematically over an extended time period, for the sole benefit of the cartel members and to the exclusion of other ODD suppliers[821]. The ODD suppliers even collected the auction results for the bidding events that they did not participate in to keep track of the existing level of prices[822]. Furthermore and contrary to what Sony/Optiarc submits, the final price from a previous tender not only had bearing on price evolution in the subsequent tenders, but could also be maintained in the subsequent tender periods[823].

(448) With respect to Sony/Optiarc's argument that while its contacts involved general statements of intent in upcoming bids or negotiations, they did not involve disclosure of specific future prices or quantities and thus cannot qualify as a restriction of competition by object, such assertion does not alter or otherwise impact the Commission assessment of the conduct. First, the Commission emphasises that also the exchange of more general information can violate Article 101(1) of the TFEU if it is capable of removing uncertainty as to the foreseeable conduct of competitors.[824] Second, the exchange of "*individualized data regarding intended future prices or quantities*" is merely an illustrative example of restriction by object included in the Horizontal Guidelines. Also other types of collusive communication (see recitals (98)-(102) and subsequent recitals for more details) qualify as conduct having

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818 This follows also from the Commission Decision in Case No COMP/M.3349 – *Toshiba/Samsung/JV* dated 2 March 2004, paragraphs 15-16, stating that "*the transaction will further reduce the number of major ODD producers from five to four accounting for more than 80% of the overall ODD market*" .

819 Horizontal Guidelines, para.90.

820 E.g. […] ID […]. The General Court also confirmed in its judgment of 11 March 1999, *Thyssen Stahl AG v Commission*, T-141/94, ECLI:EU:T:1999:48, paragraph 403 that e.g. very recent market shares of participants (which broadly fall under a similar category of information as the auction results) which are not publicly available, are by their very nature confidential data.

821 See, to that effect judgment of the Court of Justice of 28 May 1998, *John Deere Ltd v Commission*, C-7/95 P, ECLI:EU:C:1998:256, paragraph 89-90.

822 See e.g. ID […].

823 See, e.g. ID […]: […] or ID […] or ID […].

824 Judgment of the Court of Justice of 19 March 2015, *Dole Food and Dole Fresh Fruit Europe v Commission*, C-286/13 P, ECLI:EU:C:2015:184, paragraph 134.

anticompetitive object[825], including those in which Sony and Sony Optiarc were involved. The evidence implicating Sony and Sony Optiarc in the cartel shows that they exchanged clear, individualised ranking and pricing intentions that were liable to influence the conduct of the competitors on the market. For example, internal […] emails[826] regarding upcoming tenders state "[...] *Sony is approaching Dell for Q1 HH SATA BDCombo. The pricing they plan to offer is ~$ 150/Q1*" and "Optiarc indicated that they wanted #3 or even #2".

(449) Sony/Optiarc argues[827]that the conduct, market position and objectives of Sony and Sony Optiarc differed materially from those of other addressees and that the Commission's failure to recognize the substantial differences in ODD suppliers' conduct violates the principle of equal treatment. In particular, Sony/Optiarc submits that there is no allegation that Sony or Sony Optiarc reached any agreements with any of the competitors, furthermore that they were viewed as a marginal supplier, that that they were involved in far fewer contacts than HLDS, PLDS or TSST, their employees took substantially less initiative in terms of calling their counterparts, refused to answer a large number of calls from their counterparts and have not engaged in any means to conceal their communications. Moreover Sony/Optiarc claims not to have been involved in the substantial management-level discussions between ODD suppliers. Sony/Optiarc also argues that on many occasions the leniency applicants could not obtain information from Sony or Sony Optiarc or were uncertain about or surprised by Sony or Sony Optiarc's actions in various procurement events. In the same vein, TSST argues[828] that other ODD suppliers saw TSST as a "wild horse" – an "aggressive", "unpredictable", "unreliable" and "untrustworthy" competitor who was always determined to be "#1" and "the lowest-priced" to Dell and HP, which is inconsistent with the existence of a collusion.

(450) According to settled case-law, it is sufficient for the Commission to show that the undertaking concerned participated in meetings at which anti-competitive agreements were concluded, without manifestly opposing them, to prove to the requisite standard that the undertaking participated in the cartel[829].

(451) Furthermore a party which tacitly approves of an unlawful initiative, without publicly distancing itself from its content or reporting it to the administrative authorities, effectively encourages the continuation of the infringement. That complicity constitutes at least a passive mode of participation in the infringement which is capable of rendering the undertaking liable[830].

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825 Under paragraph 73 of the Horizontal Guidelines, "*Exchanging information on companies' individualised intentions concerning future conduct regarding prices or quantities is particularly likely to lead to a collusive outcome*" (emphasis added).

826 ID […] and ID […]. See also, e.g. ID […] or ID […].

827 ID […][…].

828 ID […][…].

829 See judgment of the Court of Justice of 28 June 2005, *Dansk Rørindustri and Others v Commission*, C-189/02 P, C-202/02 P, C-205/02 P to C-208/02 P and C-213/02 P, ECLI:EU:C:2005:408, paragraph 145 and judgment of the Court of Justice of 7 January 2004, *Aalborg Portland A/S and Others v Commission*, C-204/00P C-205/00P, C-211/00P, C-213/00P, C-217/00P and C-219/00P, ECLI:EU:C:2004:6, paragraph 81.

830 See to that effect judgment of the Court of Justice of 7 January 2004, *Aalborg Portland A/S and Others v Commission*, C-204/00P C-205/00P, C-211/00P, C-213/00P, C-217/00P and C-219/00P, ECLI:EU:C:2004:6, paragraph 84.

(452) In this case, none of the aspects pointed out by Sony/Optiarc and TSST alter the conclusions drawn by the Commission from the facts or otherwise justify a differential treatment of these parties. The Commission observes that Sony and Sony Optiarc as well as TSST representatives took part in numerous collusive contacts over an extended period of time without manifesting their disagreement or objections to the matters discussed and agreed.

(453) Furthermore, the fact that the parties may have had subjective intentions or were seen as "wild horse" by the others does not exonerate them from liability for the cartel participation. According to settled case-law, collusive arrangements can be restrictive by object even if the parties had other motives or pursued their own interests and were perceived as unpredictable or unreliable. An undertaking which despite colluding with its competitors follows a more or less independent policy on the market may simply be trying to exploit the cartel for its own benefit[831]. Moreover, as an internal […] email reporting on discussion with TSST's […] illustrates, TSST's aim that it shared with its competitors was to maintain the market share, while not bidding prices that would be too low[832]. This does not only demonstrate the clear interest of TSST in collusion, but also the anticompetitive objective of the cartel participants to sell optimal ODD volumes on the market at price levels higher than they would have been in the absence of the collusion.

(454) Occasional inability to receive sensitive information from Sony or Sony Optiarc in relation to a specific bidding event, be it as a result of reluctance or unavailability on their part does not amount to public distancing from the ODD cartel and does not affect the Commission's assessment. The fact that the ODD suppliers were on some occasions uncertain about or surprised by Sony's and Sony Optiarc's actual behaviour equally does not alter the Commission's findings, since the ODD cartel constitutes a restriction of competition by object, irrespective of the actual outcome of any bidding procedures to which the concertation related. Furthermore, while Sony and Sony Optiarc might not have been involved in all cartel manifestations throughout their cartel participation, this could well have resulted from their lack of participation as a bidder in specific procurement events and/or limited business operations, hence from reasons unrelated to the cartel[833]. Therefore, the frequency of involvement in cartel manifestations rather appears to reflect the scope of Sony's and Sony Optiarc's business respectively. Sony's and Sony Optiarc's participation in fewer out of a significant number of contacts, which extended over a longer period of time certainly does not mean that they were implicated in a less serious violation of Article 101 (1) of the TFEU.

(455) Even if Sony and Sony Optiarc might have been subjectively viewed as a marginal ODD supplier by the other parties or might have not used any means to conceal their contacts, this is not indicative of any lesser degree of participation in the cartel. It neither publicly dissociated itself from the collusive contacts, nor did it notify the relevant authorities about the unlawful conduct. Moreover, even if Sony or Sony Optiarc had played only a passive role or a minor role in some aspects of the

831 See, to that effect judgment of the General Court of 27 September 2006, *Archer Daniels Midland Co v Commission*, T-59/02, ECLI:EU:T:2006:272, paragraph 189.

832 ID […][…]")

833 This is also confirmed in ID […][…]. Sony submits that […]. It also states that […].

infringement (which is not the case) this would not be material to the establishment of an infringement on its part[834].

(456) On the point of management involvement in the collusion, the anti-competitive scheme subject to this case covers competitor conduct in relation to ODD procurement for Dell and HP, irrespective of the level of management involved in that conduct. Hence, whether higher management of Sony and Sony Optiarc was involved in the cartel contacts or not does not have any bearing on the finding of the infringement[835].

(457) Sony/Optiarc also implies[836] that an exchange of information about preferred rankings of the ODD suppliers does not constitute a violation of competition law.

(458) According to settled case-law, in order to prove the existence of the concerted practice, it is sufficient that, by its statement of intention, the competitor eliminated or, at the very least, substantially reduced uncertainty as to the conduct to expect of the other on the market.[837]

(459) In this case, it is clear that the exchange of future intentions on rankings enabled the participants to better understand the future behaviour of their competitors and to take this into account when planning their future business conduct. Sharing of information about intended ranking behaviour is, especially on the highly oligopolistic ODD market, indicative of future pricing and volumes strategy and therefore constitutes a restriction of competition by object. This is irrespective of the actual outcome of any bidding procedures to which the concertation relates. Furthermore, the Commission notes that the scope of the cartel arrangements is wider than exchanges of ranking intentions (see Section 4 and recital (305)).

5.4.5. Effect upon trade between EU Member States and between EEA Contracting Parties

5.4.5.1. Principles

(460) Article 101(1) of the TFEU is aimed at agreements which might harm the attainment of a single market between the Member States, whether by partitioning national markets or by affecting the structure of competition within the common market. Similarly, Article 53(1) of the EEA Agreement is directed at agreements that undermine the achievement of a homogeneous European Economic Area.

(461) The Court of Justice and the General Court have consistently held that, "*in order that an agreement between undertakings may affect trade between Member States, it must be possible to foresee with a sufficient degree of probability on the basis of a set of*

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834 Judgment of the Court of Justice of 7 January 2004, *Aalborg Portland A/S and Others v Commission*, C-204/00P C-205/00P, C-211/00P, C-213/00P, C-217/00P and C-219/00P, ECLI:EU:C:2004:6, paragraph 86.

835 See, to that effect judgment of the Court of Justice of 7 June 1983, *SA Musique Diffusion Française and others v Commission*, 100-103/80, ECLI:EU:C:1983:158, paragraph 97. See also judgment of the General Court of 20 March 2002, *HFB Holding and Others v Commission*, T-9/99, ECLI:EU:T:2002:70, paragraph 275; Judgment of the General Court of 20 March 2002, *Brugg Rohrsysteme GmbH v Commission*, T-15/99, ECLI:EU:T:2002:71, paragraph 58; Judgment of the General Court of 29 April 2004, *Tokai Carbon GmbH and others v Commission*, T-236/01, ECLI:EU:T:2004:118, paragraph 277.

836 ID […][…].

837 Judgment of the General Court of 15 March 2000, *Cimenteries CBR and Others v Commission*, T-25/95 etc., ECLI:EU:T:2000:77, paragraph 1852.

objective factors of law or fact that it may have an influence, direct or indirect, actual or potential, on the pattern of trade between Member States".[838] In any event, whilst Article 101 of the TFEU "does not require that agreements referred to in that provision have actually affected trade between Member States, it does require that it be established that the agreements are capable of having that effect"[839].

(462) The application of Articles 101 of the TFEU and Article 53 of the EEA Agreement to a cartel is not, however, limited to that part of the members' sales that actually involve the transfer of goods from one State to another. Nor is it necessary, in order for these provisions to apply, to show that the individual conduct of each participant, as opposed to the cartel as a whole, affected trade between Member States[840].

(463) Agreements and practices covering or implemented in several Member States are in almost all cases by their very nature capable of affecting trade between Member States.[841] Agreements between undertakings in two or more Member States that concern imports and exports are by their very nature capable of affecting trade between Member States.[842] Cartel agreements such as those involving price fixing and market sharing covering several Member States are by their very nature capable of affecting trade between Member States.[843] Import into one Member State may be sufficient to trigger effects of this nature. Imports can affect the conditions of competition in the importing Member State, which in turn can have an impact on exports and imports of competing products to and from other Member States.[844]

5.4.5.2. Application in this case

(464) The supply of ODDs is characterised by a substantial volume of trade between third countries outside of the EEA and EEA Member States. The parties that are addressees of the Decision are the major companies active worldwide in the supply of ODDs and generally have their headquarters, sales offices and/or production facilities outside the EEA. Nevertheless, they sell ODDs on a worldwide basis, including in the whole territory of the EEA, to customers such as Dell and HP. Dell and HP incorporate them into products which are further sold to final consumers worldwide, including in the EEA. Production facilities of Dell, HP or their ODMs were at least in part also located in the EEA (see recital (53)).

(465) Since the geographic scope of the present infringement is the whole EEA, it is capable of affecting trade between Member States. Moreover, the cartel participants' market share which is likely to be higher than 5% and their annual EU turnover

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838 See judgment of the Court of Justice of 30 June 1966, *Société Technique Minière*, C-56/65 ECLI:EU:C:1966:38, paragraph 7; Judgment of the Court of Justice of 11 July 1985, *Remia and Others v Commission*, 42/84, ECLI:EU:C:1985:327, paragraph 22 and judgment of the General Court of 15 March 2000, *Cimenteries CBR and Others v Commission*, T-25/95 etc., ECLI:EU:T:2000:77.

839 Judgment of the Court of Justice of 28 April 1998, *Javico*, C-306/96, ECLI:EU:C:1998:173, paragraphs 16 and 17; see also judgment of the General Court of 15 September 1998, *European Night Services v Commission*, T-374/94, ECLI:EU:T:1998:198 , paragraph 136.

840 See judgment of the General Court of 10 March 1992, *Imperial Chemical Industries v Commission***,** T-13/89, ECLI:EU:T:1992:35, paragraph 304.

841 Commission Notice - Guidelines on the effect on trade concept contained in Articles 81 and 82 of the Treaty, OJ C 101, 27.04.2004, p. 81-96 (the " Guidelines on the effect on trade"), paragraph 61.

842 Guidelines on the effect on trade, paragraph 62.

843 Guidelines on the effect on trade, paragraph 64; Judgment of the General Court of 6 April 1995, *Usines Gustave Boël v Commission*, T-142/89, ECLI:EU:T:1995:63, paragraph 102.

844 Guidelines on the effect on trade, paragraph 101.

which is higher than EUR 40 million further indicate that the present infringement had an appreciable effect on trade.

(466) As set out in recital (464), the procurement for ODDs is carried out on a worldwide basis and the products are imported, among others, into the EEA. The agreements and concerted practices that are the subject of this Decision therefore had an appreciable effect upon trade between EU Member States and the Contracting Parties of the EEA Agreement.

5.4.5.3. Arguments of the parties and assessment thereof by the Commission

(467) Sony/Optiarc argues[845] that there is not sufficient evidence of appreciable impact on EEA commerce with respect to the HP notebook conduct and, more specifically, that the cost of ODDs sold to HP did not have any appreciable impact on the price of an HP notebook sold within the EEA.

(468) The Commission notes that the behaviour assessed for the purposes of the present case strictly relates to the ODD industry and in no way concerns products manufactured on downstream markets, which renders the claim raised by Sony irrelevant. Moreover, an agreement that may affect trade between Member States and that has an anti-competitive object constitutes, by its nature and independently of any concrete effect that it may have, an appreciable restriction on competition[846]. Having regard to the fact that the anticompetitive arrangements pursued by the parties to this case satisfy all of these criteria, the argument brought forward by Sony has to be dismissed.

5.5. Application of Article 101(3) of the TFEU and Article 53(3) of the EEA Agreement

5.5.1. Principles

(469) The provisions of Article 101(1) of the TFEU and Article 53(1) of the EEA Agreement may be declared inapplicable under Article 101(3) of the TFEU and Article 53(3) of the EEA Agreement in the case of an agreement or concerted practice which contributes to improving the production or distribution of goods or to promoting technical or economic progress, provided that it allows consumers a fair share of the resulting benefit, does not impose restrictions that are not indispensable to the attainment of those objectives and does not afford the undertakings concerned the possibility of eliminating competition in respect of a substantial part of the products in question.

5.5.2. Application in this case

(470) On the basis of the facts before the Commission, there are no indications suggesting that the ODD cartel entailed any efficiency benefits or otherwise promoted technical or economic progress. The conditions for exemption provided for in Article 101(3) of the TFEU and Article 53(3) of the EEA Agreement are therefore not met in this case. The parties did not claim that their conduct falls under Article 101(3) of the TFEU or Article 53(3) of the EEA Agreement.

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845 ID […][…].

846 As most recently confirmed in judgment of the Court of Justice of 13 December 2012, *Expedia Inc. v Autorité de la concurrence and Others*, C-226/11, ECLI:EU:C:2012:795 paragraph 37.

6. ADDRESSEES

6.1. Principles

(471) Articles 101 of the TFEU and 53 EEA apply to undertakings and associations of undertakings.[847] The concept of undertaking covers any entity engaged in an economic activity, regardless of its legal status and the way in which it is financed.[848]

(472) The term "undertaking" must be understood as designating an economic unit even if in law that economic unit consists of several natural or legal persons.[849] When such an economic entity infringes Article 101 of the TFEU, it falls, according to the principle of personal responsibility, to the natural or legal person who operates the undertaking which participates in the cartel to answer for that infringement; in other words the principal of the undertaking is liable[850].

(473) The conduct of a subsidiary may be imputed to the parent company in particular where, although having a separate legal personality, that subsidiary does not decide independently upon its own conduct on the market, but carries out, in all material respects, the instructions given to it by the parent company, having regard in particular to the economic, organisational and legal links between those two legal entities. In such a situation, the parent company and its subsidiary form a single economic unit and therefore form a single undertaking for the purposes of Union competition law. In such circumstances, a decision imposing fines can be addressed to the parent company, without it being necessary to establish the personal involvement of the parent company in the infringement.[851]

(474) In the specific case where a parent company has a (direct or indirect) 100% shareholding or near 100% shareholding in a subsidiary which has infringed the Article 101 of the TFEU there is a rebuttable presumption that the parent company does in fact exercise a decisive influence over the conduct of its subsidiary.[852] In

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847 Judgment of the Court of Justice of 7 January 2004, *Aalborg Portland A/S and Others v Commission*, C-204/00P C-205/00P, C-211/00P, C-213/00P, C-217/00P and C-219/00P, ECLI:EU:C:2004:6, paragraph 59.

848 Judgment of the Court of Justice of 28 June 2005, *Dansk Rørindustri and Others v Commission*, C-189/02 P, C-202/02 P, C-205/02 P to C-208/02 P and C-213/02 P, ECLI:EU:C:2005:408, paragraph 112; Judgment of the Court of Justice of 10 January 2006, *Cassa di Risparmio di Firenze and Others*, C-222/04, ECLI:EU:C:2006:8, paragraph 107; and Judgment of the Court of Justice of 11 July 2006, *FENIN v Commission*, C-205/03 P, ECLI:EU:C:2006:453, paragraph 25.

849 Judgement of the Court of Justice of 29 March 2011, *ArcelorMittal Luxembourg SA v Commission and Commission v ArcelorMittal Luxembourg SA v Others*, C-201/09 P and C-216/09 P, ECLI:EU:C:2011:190, paragraph 95.

850 Opinion of Advocate General Kokott in case C-280/06 *ETI SpA and others*, ECLI:EU:C:2007:404 paragraphs 71 to 73.

851 Judgment of the Court of Justice of 10 September 2009, *Akzo Nobel and Others v Commission*, C-97/08 P, ECLI:EU:C:2009:536, paragraphs 58 and 59 and the case law referred to therein. See also judgment of the Court of Justice of 29 September 2011, *Elf Aquitaine SA* v *Commission*, C-521/09 P, ECLI:EU:C:2011:620, paragraphs 54 and 55; Judgment of the Court of Justice of 20 January 2011, *General Quimica and Others v Commission* , C-90/09 P, ECLI:EU:C:2011:21, paragraphs 37 and 38.

852 Judgment of the Court of Justice of 10 September 2009, *Akzo Nobel and Others v Commission*, C-97/08 P, ECLI:EU:C:2009:536, paragraph 60 and the case law referred to therein. See also judgment of the Court of Justice of 29 September 2011, *Elf Aquitaine SA* v *Commission*, C-521/09 P, ECLI:EU:C:2011:620, paragraph 56; Judgment of the Court of Justice of 20 January 2011, *General Quimica and Others v Commission*, C-90/09 P, ECLI:EU:C:2011:21, paragraph 39; Judgment of the General Court of 14 July 2011, *Arkema France v Commission*, T-189/06, ECLI:EU:T:2011:377, paragraphs 42-49.

those circumstances, it is sufficient for the Commission to prove that the subsidiary is 100% or near 100% owned by the parent company in order to presume that the parent company exercises a decisive influence over the commercial policy of the subsidiary. The parent company can then be held jointly and severally liable for the payment of the fine imposed on its subsidiary, unless the parent company, which has the burden of rebutting that presumption, adduces sufficient evidence to show that its subsidiary acts independently on the market.[853]

(475) For the effective enforcement of competition law it may become necessary, by way of exception from the principle of personal responsibility, to attribute a cartel offence to the new operator of the undertaking which participated in the cartel if the new operator may in fact be regarded as the successor to the original operator, that is if he continues to operate the undertaking which participated in the cartel[854]. This so called "economic continuity" test applies in cases where the legal person responsible for running the undertaking has ceased to exist in law after the infringement has been committed[855] or in cases of internal restructuring of an undertaking where the initial operator has not necessarily ceased to have legal existence but no longer carries out an economic activity on the relevant market and in view of the structural links between the initial operator and the new operator of the undertaking[856].

(476) Where the person responsible for the operation of the undertaking had ceased to exist in law, it is necessary, first, to find the combination of physical and human elements which had contributed to the commission of the infringement and then to identify the person who had become responsible for running that combination, so as to avoid the result that, because of the disappearance of the person who was responsible for its operation when the infringement was committed, the undertaking might fail to answer for it.[857]

(477) Furthermore, in accordance with the case law, the existence of an undertaking can not only be established based on the ownership links, but may also be derived from a contractual relationship entered into by two distinct legal entities, one acting as a

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853 Judgment of the Court of Justice of 10 September 2009, *Akzo Nobel and Others v Commission,* C-97/08 P, ECLI:EU:C:2009:536, paragraph 61 and the case law referred to therein; Judgment of the Court of Justice of 29 September 2011, *Elf Aquitaine SA* v *Commission,* C-521/09 P, ECLI:EU:C:2011:620, paragraph 57; Judgment of the Court of Justice of 20 January 2011, *General Quimica and Others v Commission* , C-90/09 P, ECLI:EU:C:2011:21, paragraph 40.

854 Opinion of Advocate General Kokott in case C-280/06 *ETI SpA and Others*, ECLI:EU:C:2007:404 paragraphs 75 and 76; and judgment of the Court of Justice of 7 January 2004, *Aalborg Portland A/S and Others v Commission*, C-204/00P C-205/00P, C-211/00P, C-213/00P, C-217/00P and C-219/00P, ECLI:EU:C:2004:6, paragraph 59.

855 Judgment of the Court of Justice of 8 July 1999, *Commission v Anic Partecipazioni*, C-49/92 P, ECLI:EU:C:1999:356, paragraph 145.

856 See Judgment of the Court of Justice of 7 January 2004, *Aalborg Portland A/S and Others v Commission*, C-204/00P C-205/00P, C-211/00P, C-213/00P, C-217/00P and C-219/00P, ECLI:EU:C:2004:6, paragraphs 354-360; Judgment of the General Court of 27 September 2006, *Jungbunzlauer AG v Commission*, T-43/02, ECLI:EU:T:2006:270, paragraphs 131-133; and judgment of the General Court of 30 September 2009, *Hoechst v Commission,* T-161/05, ECLI:EU:T:2009:366, paragraphs 50 - 52 and 63 and the case law referred to therein. See also, *mutatis mutandis*, judgment of the General Court of 11 March 1999, *NMH Stahlwerke GmbH v Commission*, T-134/94, ECLI:EU:T:1999:44, paragraph 126.

857 Judgment of the General Court of 17 December 1991, *Enichem Anic* v *Commission,* T-6/89, ECLI:EU:T:1991:74, paragraph 237; Judgment of the Court of Justice of 8 July 1999, *Commission v Anic Partecipazioni,* C-49/92 P, ECLI:EU:C:1999:356, paragraph 48.

principal and the other as an commercial representative or agent acting for the benefit of the principal and carrying out his principal's instructions[858].

6.2. Application in this case

(478) Applying the principles mentioned in Section 6.1, where applicable, this Decision is addressed to the legal entities (or their successors as the case may be) whose direct involvement in the infringement emerges from the evidence presented in Section 4 or, where applicable, to the ultimate and/or intermediate parent companies of these legal entities, which are presumed to have exercised decisive influence over the conduct of their wholly or nearly wholly owned subsidiaries and, which are therefore presumed to be part of the same undertaking for the purposes of the application of Article 101 of the TFEU and 53 EEA Agreement. […].

6.2.1. Philips Electronics North America Corporation, Koninklijke Philips N.V.

(479) The evidence described in Section 4.6.3 […] shows that from 13 September 2004 to 6 August 2006[859], participation in the infringement took place via an employee of Philips Electronics North America Corporation[860] ("Philips NA"). Therefore the Commission concludes that Philips NA is liable for its direct participation in the cartel, to the extent that the conduct relates to Dell.

(480) Throughout the infringement period from 13 September 2004 to 6 August 2006, Koninklijke Philips N.V. ("Philips NV") as an ultimate parent company owned indirectly […][861] of Philips NA (via Philips Holding USA).[862] In line with the case-law referred to in Section 6.1 a presumption therefore exists that Philips NV exercised decisive influence over Philips NA and consequently, that Philips NA and Philips NV formed part of the same undertaking that committed the infringement.

(481) Accordingly, the Commission concludes that Philips NV is jointly and severally liable (to the extent that the conduct relates to Dell) for participation in the infringement with Philips NA for the period from 13 September 2004 to 6 August 2006.

(482) For the reasons set forth in this Section, this Decision is addressed to Philips NA and Philips NV.

6.2.2. Lite-On Sales & Distribution, Inc., Lite-On Technology Corporation

(483) The evidence described in Section 4.6.3 […] shows that from 23 August 2004[863] to 4 March 2007[864], participation in the infringement took place via employees or individuals acting on behalf of Lite-On IT Corporation ("Lite-On Corporation")[865], Lite-On (USA) International Inc. ("LOI"), Lite-On Americas, Inc. ("LOA") and Lite-On Sales & Distribution, Inc. ("LSD")[866]. Therefore the Commission concludes that

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858 Judgment of the General Court of 11 December 2003, *Minoan Lines* v *Commission*, T-66/99 ECLI:EU:T:2003:337, paragraph 125 *et seq*.

859 ID […]; ID […].

860 […] (ID […]).

861 Philips NV held […] of shares in Philips Holding USA, which in turn held […] of shares in Philips NA (ID […]).

862 ID […].

863 For Lite-On Americas, Inc., the starting date is 4 May 2005 (see ID […]).

864 ID […].

865 […], […], […] (ID […]).

866 […], […] (ID […]),[…] (ID […]).

Lite-On Corporation, LOI, LOA and LSD are liable for their direct participation in the cartel.

(484) Throughout the infringement period from 23 August 2004 to 4 March 2007, Lite-On Corporation owned directly 100% of LOI, LOA and LSD.[867] In line with the case-law referred to in Section 6.1 a presumption therefore exists that Lite-On Corporation exercised decisive influence over LOI, LOA as well as over LSD and consequently, that Lite-On Corporation, LOI, LOA and LSD formed part of the same undertaking that committed the infringement.

(485) Accordingly, the Commission concludes that in addition to the liability for its direct involvement in the infringement, Lite-On Corporation is also jointly and severally liable for participation in the infringement with LOI, LOA and with LSD for the period from 23 August 2004 to 4 March 2007.

(486) The Commission notes that LOI and LOA were dissolved on 5 December 2008 and on 12 December 2011 respectively, while their assets were transferred to Lite-On Corporation[868]. Furthermore, as per 30 June 2014, Lite-On Corporation was merged into Lite-On Technology Corporation ("Lite-On Technology") and on this date Lite-On Corporation ceased to exist as a separate legal entity[869]. Therefore, in view of the aforesaid facts as well as in the light of the case law referred to in Section 6.1, the Commission concludes that Lite-On Technology assumes liability imputed to LOI, LOA and Lite-On Corporation as a legal and economic successor of these entities respectively.

(487) For the reasons set forth in this Section, this Decision is addressed to Lite-On Technology and LSD.

(488) Lite-On submits in its reply to the SO[870] that there is no basis for the Commission's finding that Lite-On Corporation directly participated in the infringement with regard to […] employees ([…]) as they were employees of wholly owned direct subsidiaries of Lite-On Corporation.

(489) The Commission does not dispute that to the extent that solely the employees of Lite-On Corporation subsidiaries were implicated in the infringement, liability for direct involvement cannot be established on part of Lite-On Corporation. However, it is established by the Commission based on the evidence set out in Section 4.6.3 […] that Lite-On Corporation was directly involved in the infringement over the entire infringement period material for Lite-On undertaking via […], […] and […]. It clearly follows from the evidence outlined in Section 4.6.3 and involving Lite-On undertaking (see, for example evidence referred to in recitals […] that the said employees of Lite-On Corporation were regularly in copy of emails reporting on the competitor collusion and/or its outcome. […][871] ([…]) […][872] which is sufficient to establish the direct cartel involvement of Lite-On Corporation.

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867 ID […].

868 See ID […].

869 See ID […].

870 ID […].

871 […]. Furthermore, […] also reported to his superiors acting for […] on pricing information obtained from the competitors during the material infringement period (see, for illustration ID […] or ID […]).

872 […], ID […]. […].

6.2.3. Philips & Lite-On Digital Solutions USA, Inc. (formerly Philips & BenQ Digital Storage USA, Inc.), Philips & Lite-On Digital Solutions Corporation (formerly Philips BenQ Digital Storage Corporation)[873]

(490) The evidence described in Section 4.6.3 […] shows that from 7 August 2006[874] to 25 November 2008, participation in the infringement took place via employees of Philips & Lite-On Digital Solutions USA, Inc. (formerly Philips & BenQ Digital Storage USA, Inc.) ("PLDS USA")[875] and via employees of Philips & Lite-On Digital Solutions Corporation (formerly Philips BenQ Digital Storage Corporation) ("PLDS Corporation")[876]. Therefore the Commission concludes that PLDS USA and PLDS are liable for their direct participation in the cartel.

(491) Throughout the infringement period from 7 August 2006 to 25 November 2008, PLDS Corporation owned directly […]% of PLDS USA.[877] In line with the case-law referred to in Section 6.1, a presumption therefore exists that PLDS Corporation exercised decisive influence over PLDS USA and consequently, that PLDS Corporation and PLDS USA formed part of the same undertaking that committed the infringement.

(492) Accordingly, the Commission concludes that in addition to the liability for its direct involvement in the infringement, PLDS Corporation is also jointly and severally liable for participation in the infringement with PLDS USA for the period from 7 August 2006 to 25 November 2008.

(493) For the reasons set forth in this Section, this Decision is addressed to PLDS Corporation and PLDS USA.

6.2.4. Hitachi-LG Data Storage Korea, Inc., Hitachi-LG Data Storage, Inc.

(494) The evidence described in Section 4.6.3 and […] shows that from 23 June 2004 to 25 November 2008, participation in the infringement took place via individuals employed by or acting under the instructions of Hitachi-LG Data Storage Korea, Inc.[878] ("HLDS KR"). Therefore the Commission concludes that HLDS KR is liable for its direct participation in the cartel.

(495) Throughout the infringement period from 23 June 2004 to 25 November 2008, Hitachi-LG Data Storage, Inc. ("HLDS Inc.") owned directly […] of HLDS KR[879]. […] HLDS Inc. exercised decisive influence over HLDS KR and consequently, that

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873 See Section 2.1.3 for more information on corporate history of the undertaking.

874 ID […]. See also ID […] on involvement of […] in conjunction with ID […] and ID […] in conjunction with ID […] on involvement of […] in the infringement (see also […], ID […]).

875 […], […], […] and […] (ID […]).

876 […], […], […] and […] (ID […]).

877 ID […] ([…]); ID […].

878 […], the cartel participants for HLDS that were located in Seoul, Korea ([…], […]) were employed by HLDS KR (ID […]). Those individuals based in Taiwan ([…], […]) were seconded to […], but still remained employees of HLDS KR (ID […]). Furthermore, the individuals located in the US ([…], […], […], […] and […]) were nominally employed by […], but received their salaries and other expense payments from HLDS KR, reported exclusively to HLDS KR and were in every material respect working as HLDS KR employees (ID […]). Finally, with respect to the employee based in Singapore ([…]), he was working at the liaison office run by HLDS KR itself (ID […]). See also ID […] in this respect.

879 […] (ID […]).

HLDS Inc. and HLDS KR formed part of the same undertaking that committed the infringement.

(496) Accordingly, the Commission concludes that HLDS Inc. is jointly and severally liable for participation in the infringement with HLDS KR for the period from 23 June 2004 to 25 November 2008.

(497) For the reasons set forth in this Section, this Decision is addressed to HLDS KR and HLDS Inc.

6.2.5. Toshiba Samsung Storage Technology Korea Corporation, Toshiba Samsung Storage Technology Corporation

(498) The evidence described in Section 4.6.3 and referred to in […] shows that from 23 June 2004 to 17 November 2008, participation in the infringement took place via employees[880] or individuals acting on behalf[881] of Toshiba Samsung Storage Technology Korea Corporation ("TSST KR"). Therefore the Commission concludes that TSST KR is liable for its direct participation in the cartel.

(499) Throughout the infringement period from 23 June 2004 to 17 November 2008, Toshiba Samsung Storage Technology Corporation ("TSST Japan") owned directly 100% of TSST KR[882]. In line with the case-law referred to in Section 6.1 a presumption therefore exists that TSST Japan exercised decisive influence over TSST KR and consequently, that TSST Japan and TSST KR formed part of the same undertaking that committed the infringement.

(500) Accordingly, the Commission concludes that TSST Japan is jointly and severally liable for participation in the infringement with TSST KR for the period from 23 June 2004 to 17 November 2008.

(501) For the reasons set forth in this Section, this Decision is addressed to TSST KR and TSST Japan.

(502) TSST argues[883] that […] of [...] was a third party independent sales representative never employed by TSST KR and that TSST KR cannot be held liable for his conduct.

(503) As confirmed by TSST in an earlier response to the Commission request for information[884], [...] was acting as a sales representative required to introduce, promote and solicit orders for TSST KR's ODD products. Based on the further information available on the Commission file, TSST KR had an agreement with [...], whereby [...] acted as the sales intermediate with respect to the Dell account for several products and […] was an account executive of [...] working on behalf of

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880 […], […], […], […] and […] (ID […] and ID […]).

881 […] was formally employed by [...] in the period between 2003 and approximately May 2005. Between April 2004 to June 2007, [...] was acting as a sales representative of TSST KR, while the relationship between [...] and TSST KR covered TSST KR's sales of ODD to Dell. [...] was required to introduce, promote and solicit orders for TSST KR's ODD products (ID […]). In view of the aforesaid, in line with the SO in the present case and in light of the settled case law referred to in Section 6.1, in particular recital (477), […] has been acting as a commercial representative for TSST KR in the period [...] and his actions are therefore attributable to TSST KR for the purpose of establishing liability in the present case.

882 […] (ID […]).

883 […] (ID […]).

884 ID […].

TSST KR during the material period[885]. Hence, [...] was acting for TSST KR and carrying out TSST KR's instructions and there are no indications that [...] would take on any economic risk while acting for TSST KR and that the services it provided would not be exclusive within the meaning of the relevant case law[886]. Furthermore, as confirmed by the evidence on the file[887], […] was also viewed by TSST KR's competitors as a representative of TSST KR. TSST KR and [...], as agent of TSST KR, therefore form a single economic entity, [...] being an auxiliary body forming part of the TSST KR's undertaking[888]. Having regard to the considerations set out in this recital and in line with the principles set out in Section 6.1, in particular recital (477), TSST's argument is dismissed.

6.2.6. Sony Electronics Inc., Sony Corporation

(504) The evidence described in Section 4.6.3 […] shows that participation in the infringement took place from 23 August 2004 to 15 September 2006 via employees of Sony Electronics Inc. ("SEL")[889]. Therefore the Commission concludes that SEL is liable for the direct participation in the cartel, to the extent that the conduct relates to Dell.

(505) Throughout the infringement period from 23 August 2004 to 15 September 2006, Sony Corporation as an ultimate parent owned indirectly[890] 100% of SEL. In line with the case-law referred to in Section 6.1 a presumption therefore exists that Sony Corporation exercised decisive influence over SEL and consequently, that Sony Corporation and SEL formed part of the same undertaking that committed the infringement.

(506) Accordingly, the Commission concludes that Sony Corporation is jointly and severally liable for participation in the infringement (to the extent that the conduct relates to Dell) with SEL for the period from 23 August 2004 to 15 September 2006.

(507) For the reasons set forth in this Section, this Decision is addressed to SEL and Sony Corporation.

6.2.7. Sony Optiarc America Inc. (formerly Sony NEC Optiarc America Inc.), Sony Optiarc Inc. (formerly Sony NEC Optiarc Inc.)

(508) The evidence described in Section 4.6.3 […] shows that participation in the infringement took place (i) from 25 July 2007 to 31 October 2007[891] via employee of Sony Optiarc America Inc. (formerly Sony NEC Optiarc America Inc.)[892] ("SOA")

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885 ID […] and ID […].

886 Judgment of the General Court of 15 July 2015, *voestalpine AG and voestalpine Wire Rod Austria GmbH* v *Commission*. T-418/10, ECLI:EU:T:2015:516, paragraph 139; Judgment of the General Court of 11 December 2003, *Minoan Lines* v *Commission*, T-66/99, ECLI:EU:T:2003:337, paragraph 125-130.

887 For illustration, […] (ID […]) refers to "[…]" and ID […]".

888 Judgment of the General Court of 15 July 2015, *voestalpine AG and voestalpine Wire Rod Austria GmbH* v *Commission*. T-418/10, ECLI:EU:T:2015:516, paragraph 138; Judgment of the General Court of 11 December 2003, *Minoan Lines* v *Commission*, T-66/99, ECLI:EU:T:2003:337, paragraph 125.

889 […] (ID […]) and […] (ID […]).

890 Via Sony Americas Holding, Inc. and Sony Corporation of America (ID […] and ID […]).

891 ID […] – […], which confirms transitioning of cartel participation from SOA to SOI and continuation of the implication in infringement on part of the Sony Optiarc Inc. undertaking […]; see also ID […] and recitals (83) and (196).

892 […] (ID […]).

and (ii) from 1 November 2007[893] to 29 October 2008 via individuals employed by[894] or acting on behalf[895] of Sony Optiarc Inc. (formerly Sony NEC Optiarc Inc.) ("SOI"). Therefore the Commission concludes that SOA and SOI are liable for their direct participation in the cartel, to the extent that the conduct relates to Dell.

(509) Throughout the infringement period from 25 July 2007 to 31 October 2007, SOI owned directly 100% of SOA[896]. In line with the case-law referred to in Section 6.1, a presumption therefore exists that during the said period, SOI exercised decisive influence over SOA. Consequently, SOI and SOA formed part of the same undertaking that committed the infringement in the period from 25 July 2007 to 31 October 2007.

(510) Accordingly, the Commission concludes that SOI is (in addition to its liability for direct involvement in the period from 1 November 2007 to 29 October 2008) jointly and severally liable for participation in the infringement (to the extent that the conduct relates to Dell) with SOA for the period from 25 July 2007 to 31 October 2007.

(511) For the reasons set forth in this Section, this Decision is addressed to SOI and SOA.

6.2.8. Quanta Storage Inc.

(512) The evidence described in Section 4.6.3 […] shows that from 14 February 2008 to 28 October 2008, participation in the infringement took place via employees of Quanta Storage Inc. ("Quanta")[897]. Therefore the Commission concludes that Quanta is liable for its direct participation in the cartel.

(513) This Decision is therefore addressed to Quanta.

7. DURATION OF THE INFRINGEMENT

(514) The duration of the alleged ODD cartel to which this Decision relates and the period for the application of any fines is from 23 June 2004 to 25 November 2008.

(515) For the purposes of establishing the duration to be taken into account for each of the respective legal entities involved, the Commission has taken the date of the first known anti-competitive contact of the respective undertaking with its competitors as the onset date. Furthermore, the date of the latest known occurrence of anti-competitive behaviour on part of the respective undertaking has been set as the end date.

(516) For parent companies which participated indirectly in the infringement the duration taken into account is the period throughout which the parent exercised decisive

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893 See the footnote 891, referring to the transitioning of cartel participation from SOA to SOI.

894 […] (ID […]).

895 During the infringement period, […] has been officially employed by Sony Electronics (Singapore) Pte. Ltd. ("Sony Singapore"), wholly owned subsidiary of Sony Corporation, (ID […]). […]. In view of the aforesaid, in line with the SO and in light of the settled case law referred to in Section 6.1, in particular recital (477), […] (Sony Singapore) has been essentially acting as a commercial representative for SOI and his actions are therefore attributable to SOI for the purpose of establishing liability in the present case.

896 ID […]and ID […].

897 […], […], […], […] (ID […]).

influence over the subsidiary, while the subsidiary was participating directly in the infringement.

(517) The duration taken into account for each respective legal person involved is therefore as follows:

- Philips Electronics North America Corporation from 13 September 2004 to 6 August 2006
- Koninklijke Philips N.V. from 13 September 2004 to 6 August 2006
- Lite-On Technology Corporation (as a successor of Lite-On (USA) International Inc.) from 23 August 2004 to 4 March 2007
- Lite-On Technology Corporation (as a successor of Lite-On Americas, Inc.) from 4 May 2005 to 4 March 2007
- Lite-On Sales & Distribution, Inc. from 23 August 2004 to 4 March 2007
- Lite-On Technology Corporation (as a successor of Lite-On IT Corporation liable for its direct involvement in the infringement as well as jointly and severally for cartel participation of Lite-On (USA) International Inc., Lite-On Americas, Inc. and Lite-On Sales & Distribution, Inc.) from 23 August 2004 to 4 March 2007
- Philips & Lite-On Digital Solutions USA, Inc. (formerly Philips & BenQ Digital Storage USA, Inc.) from 7 August 2006 to 25 November 2008
- Philips & Lite-On Digital Solutions Corporation (formerly Philips BenQ Digital Storage Corporation) (liable for its direct involvement in the infringement as well as jointly and severally for cartel participation of Philips & Lite-On Digital Solutions USA, Inc.) from 7 August 2006 to 25 November 2008
- Hitachi-LG Data Storage Korea, Inc. from 23 June 2004 to 25 November 2008
- Hitachi-LG Data Storage, Inc. from 23 June 2004 to 25 November 2008
- Toshiba Samsung Storage Technology Korea Corporation from 23 June 2004 to 17 November 2008
- Toshiba Samsung Storage Technology Corporation from 23 June 2004 to 17 November 2008
- Sony Electronics Inc. from 23 August 2004 to 15 September 2006
- Sony Corporation from 23 August 2004 to 15 September 2006
- Sony Optiarc America Inc. (formerly Sony NEC Optiarc America Inc.) from 25 July 2007 to 31 October 2007
- Sony Optiarc Inc. (formerly Sony NEC Optiarc Inc.) (jointly and severally liable for cartel participation of Sony Optiarc America Inc.) from 25 July 2007 to 31 October 2007
- Sony Optiarc Inc. (formerly Sony NEC Optiarc Inc.) (liable for its direct involvement in the infringement) from 1 November 2007 to 29 October 2008
- Quanta Storage Inc. from 14 February 2008 to 28 October 2008

8. REMEDIES

8.1. Article 7(1) of Regulation (EC) No 1/2003

(518) Where the Commission finds that there is an infringement of Article 101 of the TFEU and Article 53 of the EEA Agreement, it may by decision require the undertakings concerned to bring such infringement to an end in accordance with Article 7(1) of Regulation (EC) No 1/2003.

(519) Given the secrecy in which the cartel arrangements were carried out, it is not possible to determine with absolute certainty that the infringement has ceased. It is therefore necessary for the Commission to require the undertakings to which this Decision is addressed to bring the infringement to an end (if they have not already done so) and henceforth to refrain from any agreement, concerted practice or decision of an association which may have the same or a similar object or effect.

8.2. Article 23(2) of Regulation (EC) No 1/2003

8.2.1. Principles

(520) Under Article 23(2) of Regulation (EC) No 1/2003, the Commission may by decision impose on undertakings fines where, either intentionally or negligently, they infringe Article 101 of the TFEU and/or Article 53 of the EEA Agreement. For each undertaking participating in the infringement, the fine shall not exceed 10% of its total turnover in the preceding business year. Pursuant to Article 23(3) of Regulation (EC) No 1/2003 the Commission must, in fixing the amount of the fine, have regard to all relevant circumstances and particularly the gravity and duration of the infringement.

(521) The principles used by the Commission to set fines are laid down in its Guidelines on the method of setting fines imposed pursuant to Article 23(2)(a) of Regulation (EC) No 1/2003[898] ('the Guidelines on fines'). The Commission determines a basic amount for each party. The basic amount can then be increased or reduced for each undertaking if either aggravating or mitigating circumstances are found. The Commission sets the fines at a level sufficient to ensure deterrence. The Commission assesses the role played by each undertaking party to the infringement on an individual basis. Finally, the Commission applies, as appropriate, the provisions of the Leniency Notice. The Commission may use rounded figures in its calculations.

(522) The basic amount results from the addition of a variable amount and an additional amount. Both components of the basic amount are calculated on the basis of an undertaking's value of sales of goods or services to which the infringement relates in a given year. The Commission normally uses as a proxy the sales made by an undertaking during the last full business year of their participation in the infringement. If the last year is not sufficiently representative, the Commission may choose another proxy.

(523) The Commission will also take into account the accession of new Member States to the Union that took place in 2004 and 2007. For the calculation of the fine, to the extent that the data will be made available to the Commission, only the value of sales within the then 28 Contracting Parties to the EEA Agreement will be taken into account for the infringement between 1 May 2004 and 31 December 2006. From 1

[898] OJ C 210, 1.9.2006, p. 2

January 2007 until the end of the infringement, the value of sales within the 30 Contracting Parties to the EEA Agreement will be taken into account.

8.2.2. Intent

(524) In this case, the Commission considers that, based on the facts described in Section 4 and their legal assessment in Section 5, the infringement has been committed intentionally or, at the very least, negligently. In particular, the cartel contacts were driven by the conditions of the business environment characterised by the existence of two major customers with high buying power, regular contract/price negotiations and a steady downward trend of ODD prices. The evidence on the file demonstrates that the parties showed their willingness to influence this environment to their benefit. There are some references in the file to the fact that antitrust concerns were expressed and measures of concealment were taken (see recitals (94)-(97)).

(525) The infringement described in this Decision consists in particular of coordination of prices, parties' bidding behaviour and planned ranking as well as of exchanges of sensitive information with respect to sales of ODDs (for more details, see in particular Section 5.4.2.2). With respect to this type of obvious infringement, parties cannot claim that they did not act deliberately. In any event, the parties in this case acted at least negligently.

(526) The Commission therefore imposes fines in this case on the undertakings to which this Decision is addressed.

8.3. Calculation of the fines

8.3.1. The value of sales

(527) While the Commission would normally take the sales made by the undertakings during the last full business year of their participation in the infringement, in this case, in view of the considerable difference in the duration of the involvement of different parties and in order to better reflect the actual impact of the cartel, it is appropriate to deviate from that principle. Instead, a proxy for the annual value of sales (an annual average calculated on the basis of the actual value of sales made by the undertakings during the full calendar months of their respective participation in the infringement) is used as the basis for the calculation of the basic amount of the fines.

(528) The proxy for the annual value of sales will be calculated on the basis of the sales of ODDs for notebooks and desktops invoiced to Dell and HP entities located in the EEA. The invoicing criterion has been selected in order to better reflect the reality of the cartel. The evidence shows that throughout the period of the infringement, there were significant amounts of sales invoiced to Dell and HP entities established in the EEA. It is therefore evident that the actual competition for the supplies of ODDs took place on the EEA territory and the invoicing criterion thus captures the effects of the cartel on competition in the EEA.[899] While there is a significant overlap between the value of sales of delivered and invoiced ODDs, the invoicing criterion is nevertheless more adequate in this case. This is owing to the fact that the ODDs for HP notebooks

[899] Judgment of the General Court of 17 May 2013, *Parker ITR Srl and Parker-Hannifin Corp. v Commission*, T-146/09, ECLI:EU:T:2013:258**,** paragraphs 209-212.

have not been delivered to the EEA[900]. On the other hand EEA-based HP entities were invoiced for at least part of such ODD sales[901].

(529) Moreover, in case of Lite-On and Quanta, the proxy for the annual value of sales will also include the sales of ODDs intended for HP's and Dell's notebooks and desktops that were made to Sony and Sony Optiarc respectively (see Sections 2.2.1 and 2.2.2.)[…].

(530) Furthermore, based on the circumstances of the case described in Section 4, in particular the fact that the infringement concerned sales to Dell and HP only and the conduct concerning Dell started prior to the HP related contacts, the Commission will calculate the relevant value of sales separately for each customer. Moreover, two distinct duration multipliers will be applied in order to reflect each undertaking's involvement in the conduct (for more details, see Section 8.3.3.3).

(531) In addition, the value of sales for Philips, Sony and Sony Optiarc will be calculated only on the basis of sales invoiced to Dell, as it has not been established that these three undertakings participated in the anticompetitive conduct concerning HP (see Section 4.6.3).

8.3.2. Arguments of the parties and assessment thereof by the Commission

(532) HLDS submits that the calculation of the fine should be based on the value of sales made during the last year of the infringement instead of the annual average. It argues that the use of the annual average overstates the actual impact of the alleged collusive conduct. In this respect HLDS asserts that the intensity of the cartel contacts was less intense in the early phase and that the value of sales in the last year of the infringement therefore better reflects the amount of gains. HLDS further claims that if the Commission decides to use average annual sales, it should apply a yearly discount firstly to reflect the lesser intensity of the cartel contacts in the early years, secondly, to take into account that not all Dell's and HP's bidding events were subject to an anti-competitive conduct (either the contacts did not take place or the ODDs were single-sourced) and thirdly, to reflect the significant countervailing power of HP and Dell.[902]

(533) Sony/Optiarc also claims that certain sales fell outside the scope of the conduct, as they were not cartelised, and should not be therefore included in the value of sales. Furthermore, it also submits that the Commission should also exclude the sales that were attributable to third parties[903], as a big part of the revenue was passed on to these companies.[904]

(534) Quanta submits that its value of sales should not be calculated on the basis of its sales to Sony Optiarc. According to Quanta, it was not Quanta but Sony Optiarc that entered into sales agreements with Dell and HP, which then paid the purchase price not to Quanta but to Sony Optiarc. Quanta therefore claims that the inclusion of this

900 ID […]. The actual production of HP notebooks containing the ODDs took place in Asia, whereby a number of the notebooks was subsequently shipped into the EEA.

901 ID […].

902 ID […].

903 More specifically, Lite-On and Quanta designed and manufactured part of Sony Optiarc's ODD.

904 ID […][…].

value of sales would extend liability for a cartel infringement to a supplier of a company that entered into illegal agreements.[905]

(535) Contrary to HLDS' claims, it is evident that the use of an annual average calculated on the basis of the actual value of sales made by the undertakings within the duration of their participation in the cartel results in a value of sales that very much reflects the actual impact of the anticompetitive behaviour on the market. This is in particular due to the fact that the value of sales of ODDs paid by Dell and HP entities located in the EEA shows significant fluctuations over the years of the infringement and the last full business year of the infringement thus does not appear to be sufficiently representative. The annual average calculated on the basis of the actual value of sales therefore appears to be the best proxy to represent the economic importance of the infringement within the period of its duration.

(536) In relation to HLDS' claim concerning the use of a discount to reflect a smaller intensity of the cartel contacts in the early years of the infringement, the evidence on the file would appear to indicate that the contacts in the early years were less frequent than in the later years. This is nevertheless inherent to most cartels with a longer duration, as cartels are subject to certain evolution. Moreover, they are by their very nature secret and it is therefore inevitable that some of the documents showing the manifestations of anti-competitive practices will not be discovered, in particular in the early years of the infringements. Moreover, the lesser intensity of the cartel contacts is reflected in the calculation of the value of sales that takes into account the postponed start of the HP related contacts.

(537) As to HLDS' and Sony/Optiarc's claim concerning the application of a discount reflecting that not all sales were potentially cartelised, it has to be stressed that point 13 of the Guidelines on fines refers, when defining the basis for the calculation of the value of sales, to sales "*to which the infringement directly or indirectly relates*". The definition of the value of sales is therefore not limited purely to sales actually affected by the cartel, but it defines sales in the relevant market as a proxy used for the calculation of the fines.

(538) Consequently, while the concept of the value of sales referred to in point 13 of the Guidelines on fines admittedly cannot extend to encompassing sales made by the undertaking in question which do not fall within the scope of the alleged cartel, it would however be contrary to the goal pursued by that provision if that concept was understood as applying only to turnover achieved by the sales in respect of which it is established that they were actually affected by that cartel.[906] The Commission is entitled to include in the fines calculation also sales not made on the basis of tenders as they are made on the affected relevant market[907] and the cartel covered all sales of the cartel participants to HP and Dell. In particular the participants shared (see recital (305)) sensitive information relating to the existing production and supply capacity, inventory status and pull rates, the qualification status, timing of the introduction of new products or upgrades or quality issues which concerned also sales to HP and Dell made outside the tender procedures. Furthermore, the fact that both Dell and HP

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905 ID […][…].

906 Judgment of the Court of Justice of 11 July 2013, *Commission v Team Relocations NV and Others*, C-444/11 P, ECLI:EU:C:2013:464**,** paragraph 76.

907 Case C-227/14 P, *LG Display and LG Display Taiwan v Commission*, ECLI:EU:C:2015:258, paragraphs 56, 64 and 66.

possibly exercised significant countervailing power that potentially pushed down the prices of ODDs despite the collusion does not represent a factor that would trigger an application of a discount in the calculation of the value of sales. Proof of collusion between the ODD suppliers with respect to prices already suffices for the imposition of the fines. In view of the fact that the cartel behaviour constitutes an infringement by object, the Commission does not have to demonstrate that the agreements/concerted practices have been implemented on the market. The question of implementation comes into question only as one of the factors taken into account when calculating an increase of the fine for gravity. According to the case-law, the absence of benefits from a cartel cannot prevent the imposition of a fine[908]. Factors relating to the intentional aspect may be more significant than those relating to the effects, particularly in the case of infringements which are intrinsically serious, such as those involving price-fixing and market-sharing, aspects which are present in this case[909].

(539) As to Sony/Optiarc's claim concerning the turnover attributable to third parties, it is in line with the established case law[910] that third parties' costs, that the company concerned cannot control, constitute an essential element of its business and thus cannot be excluded from its turnover when fixing the basic amount of the fine. It is evident that this part of Sony's and Sony Optiarc's turnover represents an equivalent to production costs incurred by Sony and Sony Optiarc. The fact that the price of the purchased ODDs constitutes an important part of the final price charged by Sony and Sony Optiarc to Dell does not invalidate that conclusion.

(540) Contrary to Quanta's claim, it has to be stressed that Quanta was a standard supplier of ODDs. As already demonstrated in Section 4.6.3, Quanta was between February and October 2008 an integral part of the ODD cartel and its cartel conduct covered both Dell and HP. This type of involvement in the cartel activities already disqualifies Quanta from being compared to a standard supplier of a cartel participant, for which no such involvement can be demonstrated. The evidence shows that Quanta was not only copied in some emails of Sony Optiarc concerning its anticompetitive contacts with competitors, but it also demonstrates that Quanta directly took part in such contacts. It is therefore evident that Quanta's pricing policy must have been affected by the anticompetitive contacts. As to the calculation of Quanta's value of sales, point 13 of the Guidelines on fines refers to "*the value of the undertaking's sales of goods and services to which the infringement directly or indirectly relates*". It is evident that the infringement, in which Quanta was involved, covered sales of ODDs […] which were ultimately destined for both Dell and HP. […] Contrary to Quanta's claim, it is therefore not relevant that Quanta, a Taiwanese company, sold its products to Sony Optiarc, a Japanese company.

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908 Judgment of the General Court of 13 September 2010, *Trioplast Wittenheim v Commission*, T-26/06, ECLI:EU:T:2010:387, paragraph 149.

909 Judgment of the General Court of 14 May 2014, *Donau Chemie v Commission*, T-406/09, ECLI:EU:T:2014:254, paragraph 81.

910 Judgment of the General Court of 6 May 2009, *KME Germany and others v Commission*, T-127/04, ECLI:EU:T:2009:142, paragraph 91 upheld on appeal in judgment of the Court of Justice of 8 December 2011, *KME Germany and others v Commission*, C-272/09 P, ECLI:EU:C:2011:810, paragraph 53.

8.3.3. Basic amount of the fine

(541) The basic amount consists of an amount of up to 30% of a company's relevant sales, depending on the degree of gravity of the infringement and multiplied by the number of years[911] of the company's participation in the infringement, and an additional amount of between 15% and 25% of the value of a company's sales, irrespective of duration.[912]

(542) In order to determine the specific percentage of the basic amount of the fine, the Commission has regard to a number of factors, such as the nature of the infringement, the combined market share of all the undertakings concerned, the geographic scope of the infringement and whether the infringement has been implemented.[913]

8.3.3.1. Gravity

(543) The Commission bases its assessment on the facts described in this Decision. The Commission's assessment will in particular take into account that:

(a) price coordination arrangements are by their very nature among the worst kind of violation of Articles 101 of the TFEU and 53 of the EEA Agreement. Therefore, the proportion of the value of sales taken into account for such infringements will generally be set at the higher end of the scale of the value of sales[914]; and

(b) the cartel arrangements covered […] the whole EEA.

(544) Given the specific circumstances of this case, in particular taking into account the criteria outlined in recital (543), the proportion of the value of sales to be taken into account for the calculation of the gravity should be 16 % for all addressees of this Decision.

8.3.3.2. Arguments of the parties and assessment thereof by the Commission

(545) Sony/Optiarc[915] and Quanta[916] claim that they were not involved in any price-fixing in sense of point 23 of the Guidelines on fines. They also stress that they only played a minor role, often declined to share its information and competed aggressively and were involved in fewer contacts than other ODD suppliers. Moreover, Sony/Optiarc also addresses the lack of any market impact (overall decline of ODD prices) and concludes that the gravity multiplier should be at the lower end of the scale (below 15%) in case of Sony and Sony Optiarc.

(546) TSST also argues that the conduct amounts, at most, to bilateral exchanges of information between ODD suppliers and not to multilateral price-fixing. Furthermore, according to TSST, the information flow was far less intense and systematic than is usually seen in cartel cases and it concerned only two customers.

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911 If appropriate under the circumstances of the case, the Commission may count periods of less than a year as the corresponding fraction of a year (for instance, 3 months as a factor 0.25 instead of 0.5).

912 Points 19-26 of the Guidelines on fines.

913 Points 21-22 of the Guidelines on fines.

914 Point 23 of the Guidelines on fines.

915 ID […][…].

916 ID […][…].

TSST concludes that it generally implemented an aggressive strategy aimed at quickly gaining the role of market leader and, subsequently, defending it.[917]

(547) Similar claims were also submitted by HLDS, which says the conduct primarily consisted of exchanges of information which did not significantly dampened competition. According to HLDS, a 15% gravity factor would adequately reflect the gravity of the conduct.[918]

(548) As explained in Section 5.4.2, the evidence on the file demonstrates that the cartel participants reached explicit agreements, coordinated their business behaviour including their bidding strategies and exchanged sensitive information, which qualifies at least for concerted practices. More specifically, the parties concerted amongst other on intended pricing quotations and/or ranges, their planned bidding behaviour, including ranking and volume sought and they also shared other sensitive information. The mutual information sharing enabled the cartel participants to counter different strategies employed by customers to stimulate price competition.

(549) The anticompetitive conduct of the cartel participants can thus be classified as horizontal price-fixing, which is by its very nature among the most harmful restrictions of competition.[919] The fact that the conduct of the cartel parties consisted in particular of parallel bilateral contacts was a logical choice, as multilateral contacts would not have been effective in the framework of negotiations with customers characterised by their short life cycle. Moreover, the occurrence of predominantly bilateral anticompetitive contacts does not have any bearing on the overall assessment of the gravity of an infringement.

(550) As to the claims of Sony/Optiarc and Quanta concerning their minor role in the infringement, it has to be stressed that although it is true that Sony, Sony Optiarc and Quanta were not involved in all anti-competitive contacts throughout the cartel (which is actually the case for all the parties) it does not mean that Sony, Sony Optiarc and Quanta were implicated in a less serious violation of competition rules. The description provided in Section 4 demonstrates that Sony, Sony Optiarc and Quanta took part in series of cartel contacts during the duration of their participation in the cartel. Furthermore, the anticompetitive conduct of the parties constituted behaviour with an identical anticompetitive aim and Sony, Sony Optiarc and Quanta participated in all aspects characterising this anticompetitive conduct. Moreover, the fact that Sony and Sony Optiarc might have occasionally refused to share certain information in relation to a specific bidding event does not amount to public distancing from the cartel and is not liable to affect the gravity of their behaviour. Finally, as to Sony/Optiarc's claim concerning the lack of impact of the anticompetitive conduct on the market, it was confirmed by the case law that the Commission is not obliged to take into account the impact of the cartel when establishing the basic amount of the fine.[920]

(551) As to the TSST's claims regarding its aggressive market behaviour, it has to be stressed that this type of market behaviour does not have any impact on the

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917 ID […][…].

918 ID […].

919 Point 23 of the Guidelines on fines.

920 Judgment of the General Court of 14 May 2014, *Donau Chemie v Commission*, T-406/09, ECLI:EU:T:2014:254, paragraphs 72, 76-82.

Commission's gravity assessment. The fact that TSST might have followed its own interests does not mean that it did not participate in the anticompetitive conduct, but rather that it was simply trying to exploit the cartel for its own benefit. While the evidence shows that TSST did indeed frequently bid for the first ranking in the RFQs, however, TSST regularly communicated its planned bidding behaviour to the other competitors in order to indicate to them TSST's intention and thus prevent possible downward pricing trend. As to TSST's claim concerning the number of customers affected by the anticompetitive conduct, the limited scope of the conduct is already reflected in the calculation of the value of sales. The relevant value of sales consists only of the sales to Dell and HP and does not therefore take into account the sales of ODDs in the whole market.

8.3.3.3. Duration

(552) Rather than rounding up periods as suggested in point 24 of the Guidelines on Fines, in this case the Commission takes into account the actual duration of participation in the infringement of the parties on a (rounded down) monthly and pro rata basis.

(553) In calculating the fine to be imposed on each undertaking, the Commission also takes into consideration the respective duration of the infringement, as described in Section 7. Moreover, as already mentioned in Recital (530), the Commission takes into account the later start of the HP related contacts and distinct duration multipliers are thus used in the fines calculation for the Dell and HP related contacts. The increase for duration is calculated on the basis of full months.

Table 2: Value of Sales

Entity	**Value of sales (EUR)**	**Duration**	**Multipliers**
Koninklijke Philips N.V. and Philips Electronics North America Corporation	Dell: 23 103 862[921]	Dell: 13 September 2004 to 6 August 2006	1.83
Lite-On Technology Corporation and Lite-On Sales & Distribution, Inc.	Dell: 37 539 721[922] HP: 28 734 861[923]	Dell: 23 August 2004 to 4 March 2007 HP: 30 November 2005 to 4 March 2007	2.5 1.25
Philips & Lite-On Digital Solutions Corporation	Dell: 24 947	Dell: 7 August 2006 to 25	2.25

921 ID […].
922 ID […].
923 ID […].

and Philips & Lite-On Digital Solutions USA, Inc.	825[924] HP: 20 602 417[925]	November 2008 HP: 3 February 2007 to 25 November 2008	1.75
Hitachi-LG Data Storage, Inc. and Hitachi-LG Data Storage Korea, Inc.	Dell: 49 219 825[926] HP: 52 588 024[927]	Dell: 23 June 2004 to 25 November 2008 HP: 30 November 2005 to 25 November 2008	4.25 (see Section 8.4.2) 2.91
Toshiba Samsung Storage Technology Corporation and Toshiba Samsung Storage Technology Korea Corporation	Dell: 68 185 491[928] HP: 29 439 806[929]	Dell: 23 June 2004 to 17 November 2008 HP: 20 June 2006 to 17 November 2008	4.33 2.33
Sony Corporation and Sony Electronics Inc.	Dell: 37 631 108[930]	Dell: 23 August 2004 to 15 September 2006	2
Sony Optiarc Inc. and Sony Optiarc America Inc.	Dell: 28 014 950[931]	Dell: 25 July 2007 to 29 October 2008 Dell: 25 July 2007 to 31 October 2007	1.25 0.25
Quanta Storage Inc.	Dell: 24 614 684[932] HP: 2 538 026[933]	Dell: 14 February 2008 to 28 October 2008 HP: 10 April 2008 to 28 October 2008	0.66 0.5

924 ID […], ID […].
925 ID […].
926 ID […].
927 ID […].
928 ID […][…].
929 ID […][…].
930 ID […], ID […][…].
931 ID […][…]. The credit applied in the period May 2007-February 2008 […] was taken into account on a pro rata basis (seven tenths of the credit amount) within the period for which the actual sales were calculated (recital (527)).
932 ID […][…].
933 ID […][…].

8.3.3.4. Additional amount

(554) Irrespective of the duration of the undertakings' participation in the infringement, the Commission will include in the basic amount a sum of between 15% and 25% of the value of sales to deter undertakings from even entering into horizontal price-fixing, market-sharing and output-limitation agreements.[934]

(555) Given the specific circumstances of this case, taking into account the criteria discussed in Section 8.3.3.1, the percentage to be applied for the additional amount should be 16 %.

8.3.3.5. Arguments of the parties and assessment thereof by the Commission

(556) Sony/Optiarc claims that there is no ground for applying an entry fee with respect to Sony and Sony Optiarc, as the infringement did not concern price fixing collusion. It further adds that if the Commission nevertheless decides to apply an entry fee, its rate should be set at 15%.

(557) Point 25 of the Guidelines on fines stipulates that the amount of the entry fee is calculated by taking into account the same factors, which were used for the calculation of the gravity multiplier.[935] As already mentioned in recital (543), the Commission came to the conclusion that the conduct of the parties can be classified as a price coordination arrangement covering the entire EEA which warrants a gravity multiplier of 16 %. Therefore, contrary to Sony/Optiarc's arguments, the inclusion in the basic amount of a 16 % rate of the additional amount in application of point 25 of the Guidelines on fines was justified[936].

8.3.3.6. Calculation and conclusion on basic amounts

(558) Based on the criteria explained in this Section 8.3, the basic amount of the fine should be calculated as follows:

Table 3: Basic amounts

Entity	**Basic amount (EUR)**
Koninklijke Philips N.V. and Philips Electronics North America Corporation	10 461 000
Lite-On Technology Corporation and Lite-On Sales & Distribution, Inc.	31 366 000
Philips & Lite-On Digital Solutions	

934 Point 25 of the Guidelines on fines.

935 See also Judgment of the Court of Justice of 11 July 2013, *Commission v Team Relocations NV and Others*, C-444/11 P, ECLI:EU:C:2013:464**,** paragraphs 139-141.

936 See Judgment of the General Court of 13 September 2013, *Total Raffinage Marketing v Commission*, T-566/08, ECLI:EU:T:2013:423, paragraphs 441-445.

Corporation and Philips & Lite-On Digital Solutions USA, Inc.	22 037 000
Hitachi-LG Data Storage, Inc. and Hitachi-LG Data Storage Korea, Inc.	74 243 000
Toshiba Samsung Storage Technology Corporation and Toshiba Samsung Storage Technology Korea Corporation	73 833 000
Sony Corporation and Sony Electronics Inc.	18 062 000
Sony Optiarc Inc. and Sony Optiarc America Inc.	10 085 000
Quanta Storage Inc.	7 146 000

8.3.4. Adjustment to the basic amount

8.3.4.1. Aggravating factors

(559) The Commission may consider aggravating circumstances that result in an increase of the basic amount. These circumstances are listed in a non-exhaustive way in point 28 of the Guidelines on fines.

(560) No aggravating circumstances have been found.

8.3.4.2. Mitigating factors

(561) As described in recitals (366), (372) and (375), Philips', Sony's and Sony Optiarc's participation in the HP-related contacts has not been established and there is no proof that they were aware of those contacts. The Commission grants a 3 % reduction for their lack of awareness of and liability for the part of the single and continuous infringement that relates to HP (meaning the bilateral contacts between the other participants relating to HP). As regards the amount of the reduction, although the value of sales already reflects that these undertakings are not liable for this part of the infringement, this reduction reflects adequately and sufficiently the less serious

gravity of their conduct[937]. Such a reduction is comparable to the uplifts that are used to reflect a higher gravity of an infringement (nature, geographical scope etc.) and should not be out of proportion with such type of uplifts. Namely the relative importance of the awareness about a set of bilateral contacts is not a more important factor for gravity than the usual gravity factors listed in point 22 of the Guidelines on Fines.

8.3.4.3. Arguments of the parties and assessment thereof by the Commission

(562) Quanta submits that it started to cooperate with the Commission by providing detailed responses to the requests for information from the moment when the requests for information reached its employees with sufficient command of English. According to Quanta, this cooperation consisting of provision of a significant number of documents and information should be assessed as a mitigating circumstance within the meaning of point 29 of the Guidelines on fines.[938]

(563) Point 29 of the Guidelines on fines provides that *"the basic amount may be reduced where the Commission finds that mitigating circumstances exist, such as: (…) where the undertaking concerned has effectively cooperated with the Commission outside the scope of the Leniency Notice and beyond its legal obligation to do so."*

(564) In relation to Quanta's claim, it has to be stressed that answering to Commission's requests for information cannot constitute an attenuating circumstance[939]. The undertakings are required to answer requests for information and are subject to penalties in case they provide the Commission with incorrect or misleading answers to a request for information.[940] Moreover, since Quanta only replied to the requests for information its behaviour does not reveal a genuine spirit of cooperation .[941]

8.3.4.4. Conclusion on the adjusted basic amount

(565) Based on the reasons described in Section 8.3.4, no aggravating circumstances and only one mitigating circumstance will be applied.

8.3.5. Deterrence

(566) The Commission pays particular attention to the need to ensure that fines have a sufficiently deterrent effect. To that end, the Commission may increase the fines to be imposed on undertakings which have a particularly large turnover beyond the sales of goods or services to which the infringement relates.[942]

(567) Sony had a worldwide total turnover of EUR 59 252 000 000 in 2014. It is considerably larger than that of the other addressees and it is particularly large compared to Sony's respective sales of ODDs. Therefore, it is appropriate to apply a factor of 1.2 to Sony's basic amount.

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937 The Commission is entitled to grant such reduction as a mitigating circumstance (See Joined Cases T-204/08 and T-212/08, *Team Relocations and others v Commission*, ECLI:EU:T:2011:286, paragraph 92).

938 ID […][…].

939 Judgment of the Court of Justice of 24 June 2015, *Del Monte* v *Commission*, C-293/13 P, ECLI:EU:C:2015:416, paragraphs 184-185.

940 Article 20(4) and Article 23(1)(a) and (c) of Regulation (EC) No 1/2003.

941 Judgment of the Court of Justice of 24 June 2015, *Del Monte* v *Commission*, C-293/13 P, ECLI:EU:C:2015:416, paragraphs 184-185.

942 Point 30 of the Guidelines on fines.

8.3.6. Arguments of the parties and assessment thereof by the Commission

(568) Sony/Optiarc submits that the fine is already sufficiently punitive for Sony and an application of a de terrence multiplier would not be proportionate, as it competed aggressively despite being a marginal ODD supplier. Sony/Optiarc also claims that the application of a deterrence multiplier is not simply a mechanical process based on the turnover of an undertaking, but the Commission should rather consider, in particular, whether the fine sufficiently sanctions the undertaking concerned based on its role within the sanctioned infringement. Sony/Optiarc also stresses that the Commission is required to assess the financial capacity of the undertaking in question. Sony/Optiarc further refers to even higher turnover of some addressees' parent companies, such as [*non-addressee*] as the parent company of TSST, where no deterrence multiplier is imposed.[943]

(569) Firstly, it has to be stressed that the deterrence multiplier is, according to the point 30 of the Guidelines on fines, applied independently from the characteristics of an undertaking's behaviour in the cartel. Secondly, point 30 of the Guidelines on fines does not take into account the financial situation of an undertaking, not even its possible financial losses in the recent years, when calculating the deterrence multiplier. According to the case-law[944], the Commission, when setting a multiplier for deterrence is not required to take account of factors other than the overall turnover and the relative size of the undertakings concerned. On the other hand, it stipulates that the fine may be increased in cases of an undertaking's particularly large turnover beyond the sales of goods or services to which the infringement relates. In case of Sony, the worldwide turnover amounts to EUR 59 252 000 000, whereas Sony's ODD sales to Dell within the duration of its participation in the cartel were approximately EUR […] million. This means that Sony's annual average sales of ODDs (as outlined in Table 2) amounted only to […] % of its worldwide turnover. The high turnover of Sony further demonstrates that the undertaking has a sufficient financial capacity and the deterrence multiplier can be applied. Contrary to Sony/Optiarc's claims, the financial capacity does not have anything in common with the financial health of the undertaking. This is investigated by the Commission only in cases of inability to pay requests under point 35 of the Guidelines on fines. Finally, the claims concerning unequal treatment compared to other addressees of this Decision are not justified either. Contrary to Sony (Sony Corporation being the ultimate parent company), the parent companies of TSST[945] were not found to form an undertaking with TSST and are not addressees of this Decision and their turnover therefore cannot be included in the calculation of the deterrence multiplier. It can be therefore concluded that the application of the deterrence multiplier in case of Sony is fully justified and in line with the Commission's practice under the Guidelines on fines.

8.3.7. Application of the 10% turnover limit

(570) Article 23(2) of Regulation (EC) No 1/2003 provides that the fine imposed on each undertaking must not exceed 10% of its total turnover relating to the business year preceding the date of the Commission decision.

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943 ID […][…].

944 Judgment of the Court of Justice of 13 June 2013, *Versalis v Commission*, C-511/11 P, ECLI:EU:C:2013:386, paragraph 95.

945 TSST is a joint venture and the parental control could not be demonstrated for any of the two parents.

(571) The basic amounts set out in Section 8.3.3.6 do not exceed 10% of the total turnover for any of the undertakings concerned except for TSST.

(572) Moreover, Sony Optiarc terminated its entire business activities in 2012 and did not generate any turnover in the following business years, including the business year preceding the date of this Decision[946]. Sony Optiarc's last business year preceding the date of the Commission Decision cannot be therefore considered as forming part of normal economic activities of a commercial company.[947] The Commission has thus used the last complete year of Sony Optiarc's normal economic activity (2013) for the purposes of determining the 10% cap.[948]

8.4. Leniency

(573) According to point 8(a) and subject to the fulfilment of requirements of Section II.A of the Leniency Notice[949], the Commission will grant immunity from any fine which would have been imposed on an undertaking disclosing its participation in an alleged cartel affecting the Community if that undertaking is the first to submit evidence and information which in the Commission's view will enable it to carry out a targeted inspection.

(574) Under points 23 and 24 of the Leniency Notice, undertakings that do not meet the immunity conditions, while disclosing their participation in the cartel may be eligible to benefit from a reduction of the fine that would otherwise be imposed on them, provided that they meet cumulative conditions of point 12 of the Leniency Notice and submit evidence of significant added value with respect to the evidence already in the possession of the Commission.

(575) In the present proceedings, in addition to the immunity application filed jointly by Philips, Lite-On and Philips & Lite-On, the Commission received an application seeking favourable treatment under the Leniency Notice from HLDS.

8.4.1. Philips, Lite-On, Philips & Lite-On

(576) On 14 January 2009, Philips submitted an application for marker pursuant to points 14 and 15 of the Leniency Notice with regard to an alleged worldwide cartel in the supply of ODD. On 29 January 2009 and on 2 March 2009 respectively, Philips, Lite-On and PLDS submitted an immunity application aiming at perfecting the marker application. On 30 June 2009, the Commission granted collectively to Philips, Lite-On and PLDS (together also referred to as "immunity applicants") conditional immunity with respect to an alleged worldwide cartel in the supply of ODDs.

(577) The Commission considers that the immunity applicants were the first to submit information and evidence which would enable the Commission to carry out a targeted inspection in connection with the cartel concerned by this Decision, as required by point 8(a) of the Leniency Notice.

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946 […] ID […].

947 Judgment of the General Court of 12 December 2012, *1. garantovaná a.s. v Commission*, T-392/09, ECLI:EU:T:2012:674, paragraph 87, 105-106.

948 Judgment of the Court of Justice of 7 June 2007, *Britannia Alloys & Chemicals Ltd. v Commission*, C-76/06 P, ECLI:EU:C:2007:326**,** paragraphs 25 and 29-30.

949 Commission Notice on Immunity from fines and reduction of fines in cartel cases published in the Official Journal of the European Union on 8 December 2006 (2006/C 298/11) ("*the Leniency Notice*").

(578) The immunity applicants cooperated genuinely, fully and on a continuous and expeditious basis throughout the procedure and has complemented its original application by further relevant submissions, both in the form of oral statements and documents as it proceeded with its internal investigation. It remained at the disposal of the Commission and provided it with further explanations and clarifications.

(579) There are no indications that, following their submission of the immunity application, the immunity applicants continued its involvement in the cartel in violation of the point 12(b) of the Leniency Notice.

(580) Furthermore, no evidence shows or suggests that the immunity applicants took any steps to coerce other undertakings to participate in the infringement.

(581) On the basis of the foregoing, the Commission concludes that Philips, Lite-On and PLDS are granted immunity from any fines that would otherwise have been imposed on them for their involvement in the ODD cartel. Consequently, any fine to be imposed on Philips, Lite-On and PLDS by this Decision are reduced by 100%.

8.4.2. HLDS

(582) On 4 and 6 August 2009 respectively, HLDS submitted an application for a reduction of fines under the Leniency Notice with regard to an alleged cartel in the ODD industry […]. […].

(583) The evidence submitted by HLDS allowed the Commission to accelerate the investigation and to clarify and complete the understanding of the framework within which the cartel operated.

(584) HLDS' submissions covering essentially the entire infringement period set out in this Decision not only corroborated the immunity applicant's statements and evidence, but also provided additional incriminating evidence which allowed the Commission to establish previously unknown facts which the Commission would not have otherwise established.

(585) The overall quality and timing of the evidence provided voluntarily by HLDS decisively strengthened, both by its very nature and by its level of detail, the Commission's ability to prove the facts in question.

(586) In view of the foregoing, HLDS is the first undertaking to provide evidence which has a significant added value in relation to the ODD infringement and qualify for reduction of fines to be otherwise imposed on it.

(587) Having regard to the considerable value of its contribution to proving the ODD cartel (especially in the specific circumstances surrounding the case, such as largely bilateral character of the contacts and inability to conduct inspections), the early stage at which the evidence was provided and the level of cooperation, HLDS is granted a 50 % reduction of the fine that would otherwise have been imposed on it for the infringement.

(588) The Commission further considers that certain information provided by HLDS under its leniency application constitutes stand-alone evidence in relation to a part of the ODD infringement not requiring further corroboration, hence amounting to the compelling evidence as set out in point 26 of the Leniency Notice.

(589) Point (26) of the Leniency Notice states, *inter alia*, that:

"If the applicant for a reduction of a fine is the first to submit compelling evidence in the sense of point (25) which the Commission uses to establish additional facts

increasing the gravity or the duration of the infringement, the Commission will not take such additional facts into account when setting any fine to be imposed on the undertaking which provided this evidence".

(590) On the basis of the compelling evidence provided by HLDS, the Commission was able to establish facts proving the existence of the ODD cartel from 23 June 2004 to 22 August 2004 (see in particular recitals (163) and (165)). Therefore, since HLDS submitted compelling evidence which the Commission used to prove the period from 23 June 2004 until 22 August 2004 (23 August 2004 is the first of the previously known anti-competitive contacts within the cartel arrangement) and thus increasing the duration of the infringement, this period will be disregarded for HLDS for the purpose of determining the fine to be imposed on it.

(591) In its SO reply[950], HLDS claims that it merits partial immunity for the cartel period up until 13 September 2004, as it has been the only company to adduce compelling evidence of the collusive practices until that date.

(592) The Commission observes that HLDS' partial immunity cannot extend beyond 22 August 2004 as the Commission relies in the Decision on evidence dated 23 August 2004 submitted by the immunity applicants which demonstrates the existence of the ODD infringement (see recital (166)). Moreover, the immunity applicants already provided that evidence in March 2009, that is more than 5 months before HLDS submitted its leniency application. Hence, HLDS' claim for partial immunity can only be partially admitted by the Commission.

8.5. Conclusion: final amount of individual fines

(593) The fines to be imposed pursuant to Article 23(2) of Regulation (EC) No 1/2003 should therefore be as follows:

Table 4: Final amounts

Entity	**Final amount (EUR)**
Koninklijke Philips N.V. and Philips Electronics North America Corporation	0
Lite-On Technology Corporation and Lite-On Sales & Distribution, Inc.	0
Philips & Lite-On Digital Solutions Corporation and Philips & Lite-On Digital Solutions USA, Inc.	0

950 […] (ID […]).

Hitachi-LG Data Storage, Inc. and Hitachi-LG Data Storage Korea, Inc.	37 121 000
Toshiba Samsung Storage Technology Corporation and Toshiba Samsung Storage Technology Korea Corporation	41 304 000
Sony Corporation and Sony Electronics Inc.	21 024 000
Sony Optiarc Inc. and Sony Optiarc America Inc.	9 782 000
Quanta Storage Inc.	7 146 000

HAS ADOPTED THIS DECISION:

Article 1

The following undertakings infringed Article 101 of the Treaty and Article 53 of the EEA Agreement by participating, during the periods indicated, in a single and continuous infringement, which consisted of several separate infringements, in the optical disk drives sector covering the whole EEA, which consisted of price coordination arrangements:

(a) Koninklijke Philips N.V., Philips Electronics North America Corporation from 13 September 2004 to 6 August 2006, for their coordination with regards to Dell

(b) Lite-On Technology Corporation, Lite-On Sales & Distribution, Inc. from 23 August 2004 to 4 March 2007, for their coordination with regards to Dell and HP

(c) Philips & Lite-On Digital Solutions Corporation, Philips & Lite-On Digital Solutions USA, Inc. from 7 August 2006 to 25 November 2008, for their coordination with regards to Dell and HP

(d) Hitachi-LG Data Storage, Inc., Hitachi-LG Data Storage Korea, Inc. from 23 June 2004 to 25 November 2008, for their coordination with regards to Dell and HP

(e) Toshiba Samsung Storage Technology Corporation, Toshiba Samsung Storage Technology Korea Corporation from 23 June 2004 to 17 November 2008, for their coordination with regards to Dell and HP

(f) Sony Corporation, Sony Electronics Inc. from 23 August 2004 to 15 September 2006, for their coordination with regards to Dell

(g) Sony Optiarc Inc. from 25 July 2007 to 29 October 2008, Sony Optiarc America Inc. from 25 July 2007 to 31 October 2007, for their coordination with regards to Dell

(h) Quanta Storage Inc. from 14 February 2008 to 28 October 2008, for its coordination with regards to Dell and HP

Article 2

For the infringement referred to in Article 1, the following fines are imposed:

(a) Koninklijke Philips N.V. and Philips Electronics North America Corporation, jointly and severally liable: EUR 0

(b) Lite-On Technology Corporation and Lite-On Sales & Distribution, Inc., jointly and severally liable: EUR 0

(c) Philips & Lite-On Digital Solutions Corporation and Philips & Lite-On Digital Solutions USA, Inc., jointly and severally liable: EUR 0

(d) Hitachi-LG Data Storage, Inc., Hitachi-LG Data Storage Korea, Inc., jointly and severally liable: EUR 37 121 000

(e) Toshiba Samsung Storage Technology Corporation and Toshiba Samsung Storage Technology Korea Corporation, jointly and severally liable: EUR 41 304 000

(f) Sony Corporation and Sony Electronics Inc., jointly and severally liable: EUR 21 024 000

(g) Sony Optiarc Inc.: EUR 9 782 000, of which EUR 5 433 000 jointly and severally with Sony Optiarc America Inc.

(h) Quanta Storage Inc.: EUR 7 146 000

The fines shall be credited in euros, within three months of the date of notification of this Decision, to the following bank account held in the name of the European Commission:

BANQUE ET CAISSE D'EPARGNE DE L'ETAT
1-2, Place de Metz
L-1930 Luxembourg

IBAN: LU02 0019 3155 9887 1000
BIC: BCEELULL
Ref.: European Commission – BUFI/AT.39639

After the expiry of that period, interest shall automatically be payable at the interest rate applied by the European Central Bank to its main refinancing operations on the first day of the month in which this Decision is adopted, plus 3.5 percentage points.

Where an undertaking referred to in Article 1 lodges an appeal, that undertaking shall cover the fine by the due date, either by providing an acceptable financial guarantee or making a provisional payment of the fine in accordance with Article 90 of Commission Delegated Regulation (EU) No 1268/2012[951].

[951] OJ L 362, 31.12.2012, p. 1.

Article 3

The undertakings listed in Article 1 shall immediately bring to an end the infringements referred to in that Article insofar as they have not already done so.

They shall refrain from repeating any act or conduct described in Article 1, and from any act or conduct having the same or similar object or effect.

Article 4

This Decision is addressed to

- Philips Electronics North America Corporation, 300 Minuteman Road, MA 01810 Andover, USA
- Koninklijke Philips N.V., Amstelplein 2, 1096 BC Amsterdam, The Netherlands
- Lite-On Sales & Distribution, Inc., 42000 Christy Street, Fremont, CA 94538, USA
- Lite-On Technology Corporation, 22F, 392 Ruey Kuang Road, Neihu, Taipei, 11492, Taiwan, R.O.C.
- Philips & Lite-On Digital Solutions USA, Inc., 42000 Christy Street, Fremont, CA 94538, USA
- Philips & Lite-On Digital Solutions Corporation, 16F, 392 Ruey Kuang Road, Neihu, Taipei, 114, Taiwan, R.O.C.
- Hitachi-LG Data Storage Korea, Inc., LG Gasan Digital Center, 459-9 Gasan-dong, Geumcheon-gu, Seoul, 153-803, Korea
- Hitachi-LG Data Storage, Inc., 4F MSC Center Bldg., 22-23, Kaigan 3-Chome, Minato-Ku, Tokyo 108-0022, Japan
- Toshiba Samsung Storage Technology Korea Corporation, 14th Floor, Building no. 102, Digital Empire 2, 486, Sin-Dong, Yeongtong-gu, Suwon-si, Gyeonggi-do 443-734, Korea
- Toshiba Samsung Storage Technology Corporation, 1-1, Shibaura 1-chome, Minato-ku, Tokyo 105-8001, Japan
- Sony Electronics, Inc., 16530 Via Esprillo, MZ-1105, San Diego, California 92127, USA
- Sony Corporation, 1-7-1 Konan, Minato-ku, Tokyo 108-0075, Japan
- Sony Optiarc America Inc., 1730 N. First St., San Jose, California 95112, USA
- Sony Optiarc Inc. (Headquarters), Gate City Osaka West Tower 11-1, Osakihigasi 1-chome, Shinagawa-ku, Tokyo 141-0032, Japan
- Quanta Storage Inc., 3F No. 188 Wenhua 2nd Rd., Guishan Shiang, Taoyuan County 333, Taiwan, R.O.C.

This Decision shall be enforceable pursuant to Article 299 of the Treaty and Article 110 of the EEA Agreement.

Done at Brussels, 21.10.2015

For the Commission
Margrethe VESTAGER
Member of the Commission

CERTIFIED COPY
For the Secretary-General,

Jordi AYET PUIGARNAU
Director of the Registry
EUROPEAN COMMISSION