COMMISSION DECISION

of 16.12.2009

relating to a proceeding under Article 102 of the Treaty on the Functioning of the European Union and Article 54 of the EEA Agreement

(Case COMP/C-3/39.530 – Microsoft (tying))

(Only the English text is authentic)

(Text with EEA relevance)

THE EUROPEAN COMMISSION,

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

Having regard to the Agreement on the European Economic Area,

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 EC Treaty¹, in particular Article 9(1) thereof,

Having regard to the Commission decision of 21 December 2007 to initiate proceedings in this case,

Having expressed concerns in the Statement of Objections adopted on 14 January 2009,

Having given interested third parties the opportunity to submit their observations pursuant to Article 27(4) of Regulation (EC) No 1/2003 on the commitments offered to meet those concerns²,

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

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

WHEREAS:

1. Introduction

- (1) This Decision is addressed to Microsoft Corporation ("Microsoft"), a company based in Redmond, State of Washington, USA, and concerns the allegedly illegal tying by Microsoft of its web browser Internet Explorer to its dominant client personal computer ("PC") operating system Windows ("Windows").
- (2) In its Statement of Objections of 14 January 2009, the Commission came to the provisional conclusion that, in view of the fact that Microsoft holds a dominant position on the market for client PC operating systems, the tying with Windows of its web browser Internet Explorer, which the Commission preliminarily found to be a separate product from Windows, infringes Article 102 of the TFEU.

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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 where appropriate.

² OJ C 242, 9.10.2009, p. 20.

Hearing Officer final report of 11.12.09.

2. THE UNDERTAKING CONCERNED

(3) Microsoft develops, manufactures, licenses and supports a wide variety of software products for many computing devices. Its turnover for the fiscal year running from July 2008 to June 2009 was USD 58 437 million⁴ (EUR 42 5864 million⁵), on which it earned net profits of USD 14 569 million⁶ (EUR 10 617 million). At the end of June 2009, Microsoft employed approximately 93 000 people world-wide on a full-time basis. Microsoft Europe Middle East & Africa controls its activities in the European Economic Area ("EEA") from Paris La Défense. Microsoft is present in all Contracting Parties to the EEA Agreement.

3. PROCEDURAL STEPS UNDER REGULATION (EC) No 1/2003

- (4) On 13 December 2007, the Commission received a complaint against Microsoft pursuant to Article 7 of Regulation (EC) No 1/2003. The complaint was lodged by Opera Software ASA ("Opera" or "the Complainant"), a company based in Oslo, Norway, which develops web browsers for client PCs, mobile phones and embedded device operating systems.
- (5) According to Opera's complaint, the tying of Internet Explorer to Windows prevents Opera's web browser from competing on the merits with Internet Explorer and forecloses competition in the market for web browsers.
- (6) On 21 December 2007, the Commission initiated proceedings with a view to adopting a decision under Chapter III of Regulation (EC) No 1/2003. On 14 January 2009, the Commission adopted a Statement of Objections setting out its competition concerns. The Statement of Objections constitutes a preliminary assessment for the purposes of Article 9(1) of Regulation (EC) No 1/2003.
- (7) The Statement of Objections was notified to Microsoft by letter of 15 January 2009. Access to the file was granted to Microsoft by letter of 26 January 2009. Microsoft's reply to the Statement of Objections was submitted on 28 April 2009.
- (8) At Microsoft's request an oral hearing was scheduled for 3, 4 and 5 June 2009. On 15 May 2009 and 19 May 2009, Microsoft sought a postponement of the oral hearing. Those requests were rejected by the Hearing Officer on 20 May 2009. Given the nature of Microsoft's submissions, the Hearing Officer considered the request for an oral hearing to have been withdrawn.

The exchange rate used for the year 1 July 2008 to 30 June 2009 is EUR 1 = USD 1.3723. This is the average of the average quarterly exchange rates for the third and fourth quarters of 2008, and the first and second quarters of 2009 (1.5050, 1.3180, 1.3029, 1.3632). Source: Eurostat.

Microsoft's annual report for the US fiscal year ending June 2009, on page 5, available for download at http://www.microsoft.com/msft/reports/ar09/10k_dl_dow.html.

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- (9) Additional facts gathered by the Commission after the adoption of the Statement of Objections were presented to Microsoft in a Letter of Facts sent on 24 July 2009. The Letter of Facts complements the Commission's preliminary assessment as set out in the Statement of Objections (see recital (6)). Additional access to the file was granted to Microsoft on 24 July 2009. Microsoft replied to the Letter of Facts on 14 September 2009.
- (10) On 7 October 2009, Microsoft submitted commitments in response to the objections raised by the Commission ("the proposed commitments"), while continuing to dispute the Commission's preliminary findings as set out in the Statement of Objections.
- (11) On 9 October 2009, a notice was published in the Official Journal of the European Union pursuant to Article 27(4) of Regulation (EC) No 1/2003⁷ ("the Notice"), summarising the case and the proposed commitments and inviting interested third parties to give their observations on those commitments within one month following the date of publication of the Notice.
- (12) By letter of 23 October 2009, the Commission informed Opera, in accordance with Article 7(1) 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 EC Treaty, that it considered that the proposed commitments were *prima facie* capable of meeting the Commission's competition concerns and that it took the preliminary view that there were insufficient grounds for conducting a further investigation into the alleged infringement.
- (13) On 10 November 2009, the Commission informed Microsoft of the observations received from interested third parties following the publication of the Notice.
- (14) On 20 November 2009, Opera submitted comments in response to the Commission's letter of 23 October 2009.
- (15) On 26 November 2009 Microsoft submitted an amended proposal for commitments ("the Commitments"). The signed version of the Commitments was formally submitted by Microsoft on 1 December 2009.
- (16) On 11 December 2009, the Advisory Committee on Restrictive Practices and Dominant Positions was consulted. On 11 December 2009, the Hearing Officer issued his final report.

⁷ OJ C 242, 9.10.2009, p. 20.

⁸ OJ L 123, 27.04.2004, p. 18.

4. PRELIMINARY ASSESSMENT

4.1. Relevant markets

4.1.1. Product markets

- (17) For the purposes of this Decision, the relevant product markets are the market for client PC⁹ operating systems and the market for web browsers for client PC operating systems on the other hand. As explained in more detail in recitals (24) to (30), Microsoft holds a dominant position in the market for client PC operating systems. That finding is not contested by Microsoft.
- (18) An operating system is "system software" that controls the basic functions of a computer and enables the user to make use of such a computer and run application software on it. The most widely used client PC operating systems are Microsoft Windows, Apple's Mac OS X and some distributions of Linux such as Ubuntu.
- (19) Web browsers are software products used by individual users of client PCs or other devices to access and interact with World Wide Web ("web") content. That content is hosted on servers which are connected to networks such as the internet. Web browsers which are able to display web content have been developed for all important client PC operating systems on the market. Technically, a web browser is a software tool that makes use of a Transfer Control Protocol/Internet Protocol ("TCP/IP") connection to send and receive Hypertext Transfer Protocol ("HTTP") data traffic in accordance with the user's wishes. The web browser then processes the answer from the relevant web server and renders¹¹ the received web content to make it visible to the user.
- (20) Most web content makes use of the web's "hypertextuality" to enable online navigation. This relates to the ability to link from one web page to other web pages (or graphics and media files) elsewhere on the web via hyperlinks ("links"). In web browsers, links are usually rendered as "clickable" so that the web browser user can navigate ("surf") the web just by pointing to and clicking on the links with the computer mouse and without having to manually enter the address of a web page. Web browsers therefore allow users to access content quickly and easily across a wide range of web pages.

Client

Client PCs are general-purpose computers designed for use by one person at a time. Users interact directly with the client PC. Client PCs are different from servers, which are powerful multi-user computers. Servers are accessed indirectly by users through their client PCs via a network. They can perform different tasks such as storage, e-mail transfer or website hosting. The terms "client PC" and "server" derive from the so-called "client/server paradigm", which describes communication between software elements as requests made by "clients" to "servers" and the corresponding replies.

[&]quot;System software" controls the hardware of the computer, to which it sends instructions on behalf of "applications" fulfilling a specific user need, such as word processing. See Microsoft's *Computer Dictionary*, Fifth Edition, on page 31.

Rendering is the graphical and functional interpretation of the source code of a web page and its transposition into the visual of the web page shown by the web browser to the user, for example, the layout, the physical appearance, colours, fonts, embedded objects such as pictures or video, links and functionality such as drop-down menus.

- (21) In addition to enabling navigation in the web, web browsers typically offer the following set of additional features:
 - (a) proxy configuration¹² which specifies how the web browser accesses web content;
 - (b) management of plug-ins to handle additional content types, such as Flash or Java programs;
 - (c) bookmarking to keep track of useful web page addresses;
 - (d) Hypertext Markup Language ("HTML") pre-processing to filter out unwanted or dangerous content;
 - (e) cookie management which allows the user to keep control of small text files deposited by many web pages into users' web browsers in order to enable recognition of previous visitors;
 - (f) pop-up blocker to manage web page window behaviour;
 - (g) tabbed browsing interface to keep several web pages open at once;
 - (h) website certificate checker to ascertain web page credentials and to protect against phishing;¹³
 - (i) offline cache to keep a copy of accessed online content for later offline usage;
 - (j) history which keeps a record of visited locations on the web.
- (22) The Commission reached a preliminary conclusion in the Statement of Objections that, by reason of its specific characteristics and the lack of realistic substitutes, the market for web browsers for client PC operating systems constitutes a separate relevant product market.

4.1.2. Geographic market

(23) The relevant geographic market for client PC operating systems and web browsers for client PC operating systems is world-wide. The objective conditions of competition are essentially the same across the world. PCs are manufactured by a large number of companies that operate on a global scale. The computers are then sold world-wide. Import restrictions, transport costs and technical requirements do not constitute significant limitations. Language-specific demand characteristics regarding the relevant software exist but, in so far as the supply-side is concerned, do not constitute an obstacle for swift supply on a global basis in accordance with language-related preferences.

"Phishing" is a fraudulent means used by cybercriminals to obtain sensitive information, such as credit card numbers or bank account numbers, for example by sending emails in which they disguise themselves as a company with which the recipient might have an online account and try to get the recipient to enter his login and password on a fake login page.

In the Help function of its web browser, Microsoft describes a proxy server as a "[...] computer that functions as an intermediary between a web browser (such as Internet Explorer) and the Internet. Proxy servers help improve web performance by storing a copy of frequently used webpages. When a browser requests a webpage stored in the proxy server's collection (cache), it is provided by the proxy server, which is faster than going to the web. Proxy servers also help improve security by filtering out some web content and malicious software. Proxy servers are used mostly by networks in organizations and companies." Proxy settings are used to tell the web browser the address of the proxy server.

4.2. Microsoft's dominant position on the market for client PC operating systems

- (24) Microsoft holds a worldwide market share of around 90% (based on estimates by IDC¹⁴) in the market for client PC operating systems. Moreover, Microsoft has consistently held that very high market share for the past ten years. ¹⁵
- (25) The nature of the barriers to entry in the client PC operating system market serves to reinforce Microsoft's very strong position in that market. The main barrier to entry results from network effects on the market.
- (26) The regular use of a client PC involves running applications on it. The overall utility that a consumer derives from a client PC operating system therefore depends on the applications he can use on it and that he expects to be able to use on it in the future. Independent Software Vendors write applications for the client PC operating systems that are most popular among users. ¹⁶ In other words, the more popular an operating system is, the more applications will be written for it and the more applications are written for an operating system, the more popular it will be among users.
- (27) Given the degree of ubiquity that Windows has attained on client PCs, the quasi-totality of commercial applications written for client PCs are therefore available for the Windows platform. In fact, many are only available for that platform.
- (28) It would be extremely difficult, time-consuming, risky and expensive to develop an alternative client PC operating system, with no application able to run on it, because users are very unlikely to buy an operating system without a wide range of applications already available, tested and used by other people. Therefore, a new operating system product being launched onto the client PC operating system market would need to be able to support a critical mass of existing Windows-dependent applications, or a comparable critical mass of applications already written for the new platform. This is commonly referred to as the "applications barrier to entry".
- (29) In addition to the applications barrier to entry, other barriers to entry, including considerable costs of development and product testing, protect Microsoft's dominant position on the market.
- (30) It follows from the above that Microsoft holds a dominant position on the market for client PC operating systems. Microsoft has not contested

Worldwide Shipments of Client Operating Systems was 92.0% and had been up to 93.6% in 2004. Source: IDC Report "Worldwide Client and Server Operating Environments 2007-2010 Forecast and Analysis: Don't Count Anybody Out Yet", February 2007.

This applies to all applications, be they mass-market ones such as word-processing, or more nichelevel applications.

International Data Corporation. See
http://idc.com/about/about/jsp:jsessionid=X5BEBZDG1GQTQCQJAFICFFAKBEAUMIWD, printed on 20 November 2009. In 2006, according to IDC, Microsoft's worldwide market share in terms of Worldwide Shipments of Client Operating Systems was 92.0% and had been up to 93.6% in 2004.

See Commission Decision 2007/53/EC of 24 March 2004, OJ L 32, 6.2.2007, p. 23, at paragraph 432.

that fact either in the *Microsoft* case before the Court of First Instance¹⁷, or in its reply to the Statement of Objections in this case.¹⁸

4.3. Substantial part of the internal market

(31) Microsoft is present in all Contracting Parties to the EEA Agreement. It holds a dominant position in the client PC operating system market in the EEA and supplies web browsers throughout the EEA. The concerned markets constitute a substantial part of the internal market.

4.4. Practices raising concerns

- (32) In its Statement of Objections, the Commission took the preliminary view that Microsoft was infringing Article 102 of the TFEU by tying its web browser Internet Explorer, which the Commission preliminarily considered to be a separate product from Windows, to its dominant client PC operating system.
 - 4.4.1. The Commission provisionally concluded that Microsoft's conduct fulfils the constituent elements of a tying abuse under Article 102 of the TFEU
- (33) In order to establish a tying abuse prohibited under Article 102 of the TFEU, the following elements must be present:
 - (a) the tying and tied goods are two separate products;
 - (b) the undertaking concerned is dominant in the tying product market;
 - (c) the undertaking concerned does not give customers a choice to obtain the tying product without the tied product;
 - (d) the tying is liable to foreclose competition.¹⁹

(34) While according to the case-law the Commission can normally assume that the tying of a specific product and a dominant product has, by its nature, a foreclosure effect,²⁰ in this case, the Commission has examined such effects more closely.

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Case T-201/04 Microsoft v Commission [2007] ECR II-3601, at paragraph 854: "[...] the Commission first observes that Microsoft has a dominant position on the client PC operating systems market (recital 799 to the contested decision). The Court notes that Microsoft does not dispute that fact."

In its reply to the Statement of Objections, Microsoft did, however, contest the fact that the Windows client PC operating system and Internet Explorer are separate products.

Case T-201/04 *Microsoft* v *Commission*, at paragraphs 842, 869 and 1058. See also Communication from the Commission "Guidance on the Commission's enforcement priorities in applying Article 82 of the EC Treaty to abusive exclusionary conduct by dominant undertakings", OJ C 45, 24.2.2009, at paragraph 50.

Case T-201/04 *Microsoft* v *Commission*, at paragraph 868. See, to that effect, Commission Decision 88/138/EEC of 22 December 1987 relating to a proceeding under Article 86 of the EEC Treaty (IV/30.787 and 31.488 - Eurofix-Bauco v. Hilti) (OJ L 65, 11.3.1988, p. 19), upheld in Case T-30/89, *Hilti* v *Commission* [1991] ECR II-1439, itself confirmed by the Court of Justice in Case-53/92 P *Hilti* v *Commission* [1994] ECR I-667. See also Commission Decision 92/163/EEC of 24 July 1991 relating to a proceeding pursuant to Article 86 of the EEC Treaty (IV/31043 - Tetra Pak II) (OJ L 72, 18.3.1992, p. 1), upheld in Case T-83/91 *Tetra Pak* v *Commission* [1994] ECR II-755, itself confirmed by the Court of Justice in Case C-333/94 P *Tetra Pak* v *Commission* [1996] ECR I-5951.

- (35) The Commission preliminarily concluded in the Statement of Objections that all those constituent elements of a tying abuse under Article 102 of the TFEU were present as regards Microsoft's tying of Internet Explorer to its dominant client PC operating system Windows.
- (36) In particular, the Commission provisionally considered that Internet Explorer and Windows were separate products, that Microsoft was dominant on the market for client PC operating systems, that computer manufacturers and end users could not technically and legally obtain Windows without Internet Explorer and that the tying was liable to foreclose competition on the merits between web browsers.
- (37) The Commission also took the preliminary view that the tying of Internet Explorer, in addition to reinforcing Microsoft's position on the market for client PC operating systems, created artificial incentives for web developers and software designers to optimise their products primarily for Internet Explorer.
- (38) Recitals (39) to (58) briefly summarise the Commission's preliminary assessment with regard to the potential foreclosure of competition, the network effects vis-à-vis web developers and software designers and the reinforcing of Microsoft's position on the market for client PC operating systems.

4.4.1.1. Potential foreclosure effects

- (39) In its Statement of Objections, the Commission preliminarily considered that the tying of Internet Explorer to Windows was liable to foreclose the market for web browsers and that the tying gave Internet Explorer an artificial distribution advantage that other web browsers were unable to match.²¹
- (40) The Commission took the preliminary view that by tying Internet Explorer to Windows, Microsoft ensured that Internet Explorer was as ubiquitous on PCs world-wide (see above recital (24)) as was Windows. Microsoft controls the distribution of Internet Explorer with Windows and does not afford competing web browser vendors access to that mode of distribution.
- (41) The Statement of Objections identified two major channels for distributing web browsers. Those two channels are distribution through computer manufacturers ("Original Equipment Manufacturers" or "OEMs") and downloading via the internet.
- (42) With respect to distribution through OEMs, the Statement of Objections noted that OEMs enter into licensing agreements with Microsoft whereby the OEMs are entitled to pre-install Windows on the client PCs which they assemble and distribute. Under Microsoft's licensing model, OEMs must license Windows with Internet Explorer pre-installed. OEMs may also install an alternative web browser but only in addition to Internet Explorer. The evidence on the file shows that OEMs which

See also the conclusion of the Court of First Instance with regard to Windows Media Player in Case T-201/04 *Microsoft* v *Commission*, at paragraph 1054.

pre-install Windows hardly ever distribute competing web browsers. Until very recently, none of the top ten OEMs in the USA and in the EEA shipped a client PC with Windows with a non-Microsoft web browser pre-installed, in spite of attempts by web browser vendors to obtain such distribution agreements.

- (43) The Commission preliminarily considered that even if competing web browser vendors came to agreements with OEMs, such agreements could not offset Internet Explorer's ubiquity, since third-party web browsers could only be installed in addition to Internet Explorer, and it was not possible for OEMs or users to turn off Internet Explorer.²²
- (44) The Commission took the preliminary view that, as long as Microsoft only ships and licenses Windows together with Internet Explorer, OEMs face negative incentives to bundle an additional web browser, since the pre-installed web browser offers essentially similar basic functionality, such as the rendering of web content or bookmark management. The reluctance of OEMs to ship two web browsers may also be explained by the additional resources which would be needed to support and test the second web browser. For many OEMs, customer support is a major business cost and the main type of incremental cost to consider when assessing the shipment of additional software.
- (45) With respect to distribution methods other than pre-installation of software through OEMs, the Commission preliminarily concluded that downloading via the internet is an important channel. However, the analysis in the Statement of Objections indicates that that alternative channel does not offset the artificial distribution advantage of Internet Explorer resulting from the tying to Windows which is liable to foreclose competition.
- (46) All main web browsers for client PC operating systems can be downloaded free of charge from the internet. Due to the development of broadband access, it has become easier over recent years to download software products, including web browsers. However, for various reasons, the Commission reached the preliminary conclusion that the downloading of web browsers from the internet does not provide a sufficiently effective distribution alternative.
- (47) While downloading from the internet is in itself a technically inexpensive way of distributing web browsers, the Commission preliminarily considered that, for that distribution mode to be successful, vendors of competing browsers must first overcome users' inertia and persuade them not to limit themselves to the pre-installed Internet Explorer. Downloading a new web browser thus requires an active decision from the user who must be aware of the existence of that alternative product.
- (48) More particularly, the Commission preliminarily considered that users are prevented from switching from Internet Explorer to competing web

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Microsoft has made it possible to turn off Internet Explorer in the Windows 7 version of the Windows client PC operating system ("Windows 7"), which was first shipped in the EEA on 22 October 2009. Windows 7 had not been released at the time of the Commission's Statement of Objections.

browsers (even if offered free of charge) through downloading due to the barriers associated with such a switch, such as searching, choosing and installing such a competing web browser, which can stem from a lack of technical skills, or be related to the user's inertia.

- (49) Those potential foreclosure effects are liable to materialise both with respect to individual consumers and with respect to businesses. Both of those groups are examined in recitals (50) to (53).
- (50) First, a Consumer survey conducted on behalf of the Commission²³ shows that more than half of Windows users and about two thirds of Windows users having Internet Explorer as their main web browser do not download web browsers from the internet or are reluctant to do so.²⁴
- (51) All Windows users who had never or had only once downloaded a web browser were also asked during the Consumer survey why they did not download web browsers or, for those who had downloaded only once, why they did not do so more often. 55% of those users say there is no need to download web browsers, 25 31% do not know how to install or download software, 15% replied that they consider downloading or installing software as difficult or complicated, 8% fear security risks and 7% are not aware that they can download a web browser. 26
- (52) The Consumer survey confirmed that there is a significant information deficit on the part of consumers. According to the survey, 62% of Windows users²⁷, and 70% of Windows users having Internet Explorer as their primary web browser²⁸, do not feel sufficiently informed about different web browsers to be able to compare their relative (dis)advantages. The survey also revealed that Windows users who do not feel sufficiently informed are also less willing to download web

At the Commission's request, the Commission's consultants TAEUS undertook empirical surveys of the actual web browser usage characteristics of both consumers and enterprises with the help of a professional market research company. The surveys were conducted in parallel in eight Member States, namely Germany, France, the United Kingdom, Italy, Spain, Poland, Romania and Sweden. The sample size was fixed at 1000 per Member State for consumers and 500 per Member State for enterprises. Data collection was done using computer-aided telephone interviews. The interviews took place from the last week of April 2009 until the end of May 2009. Interviewees were selected using a quota system based on a non-proportional stratified approach and responses were then weighted to ensure statistical representativeness. Hereinafter those surveys are referred to as: "Consumer survey" or "Business survey". The reports on these surveys prepared by TAEUS at the Commission's request are referred to as: "TAEUS Report, Consumer survey" or "TAEUS Report, Business survey".

^{51%} of Windows users have never downloaded a web browser, and 16% have downloaded a web browser only once. See TAEUS Report, Consumer survey, table 27, Distribution of Downloaded/Installed Web Browser by Internet-users, on page 43. 64% of Windows users having Internet Explorer as their main web browser never downloaded a web browser, and 14% stated they did so only once. See TAEUS Report, Consumer survey, table 28, Distribution of Downloaded/Installed Web Browser by Main Web Browser Used by Internet-users, on page 44.

²⁵ Since they already have one web browser pre-installed, either by the OEM or by someone else.

²⁶ TAEUS Report, Consumer survey, table 33, Distribution of Reasons for not Installing Web Browser by Frequency of Downloading/Installation, on page 47. Several answers were possible. On average, each respondent gave 1.42 answers.

TAEUS Report, Consumer survey, table 55, Distribution of Informed about Browsers by Internetusers, on page 65.

TAEUS Report, Consumer survey, table 56, Distribution of Informed about Browsers by Main Browser Used, on page 65. Additionally, 6% of the Internet Explorer users also do not know whether they are sufficiently informed.

browsers.²⁹ 84% of Windows users who use Internet Explorer as their primary web browser never use another web browser on their computer because they are unaware of the other options, or because they do not want to or do not know how to download.³⁰ In other words, it would appear that those consumers would at least need significant further information on available web browsers in order to be persuaded to download alternative web browsers.

- (53) The Business survey conducted on behalf of the Commission shows that the information deficit is not only limited to consumers. According to that survey, only 33% of the companies which centrally chose a web browser³¹, and 26% of the companies which centrally chose Internet Explorer³², said that they conducted an evaluation before choosing the web browser(s). For more than half of the companies which chose to centrally install Internet Explorer, the fact that a web browser was included with newly-bought PCs, or included with the operating system, was an important criterion for choosing the web browser.³³
- (54) For these reasons (which are set out in more detail in the Statement of Objections), the Commission preliminarily concluded that as a result of the tying, Internet Explorer's market share remains much higher than that of its competitors³⁴, although it could not be considered as a superior product compared to its main competitors. In fact, the Commission came to the preliminary conclusion that the tying allowed Microsoft to maintain its market share despite the fact that it did not improve Internet Explorer 6.0 for many years (while Internet Explorer 6.0 was released in 2001, Internet Explorer 7.0 was only released in 2006, and Internet Explorer 8.0 in 2009) and that neither Internet Explorer 7 nor previous versions seem to have been superior to their main competitors, in particular the Firefox web browser.

TAEUS Report, Consumer survey, table 36, Distribution of How Often Used another Browser by Main Web Browser used by Internet-users, on page 48.

^{63%} of them have never downloaded a web browser, and 15% did so only once. See TAEUS Report, Consumer survey, table 58, Distribution of Downloaded Web Browser by Informed about Browsers, on page 66.

³¹ 56% performed no such evaluation and 11% could not say. See TAEUS Report, Business survey, table 25, Choice for Centrally Chosen Browser was made after Evaluating its Features and Functionality, on page 40.

TAEUS Report, Business survey, table 26, Choice for Centrally Chosen Browser was made after Evaluating its Features and Functionality by Web Browser Used, on page 41. As a basis of comparison, one can note that 60% of the companies who chose to centrally install Firefox conducted such an evaluation.

TAEUS Report, Business survey, table 32, Important Criteria for Choosing Central Web Browser by Centrally Chosen Web Browser, on page 45.

According to data provided by Microsoft, when taking into account all operating systems, between March 2005 and March 2009, the gap between Internet Explorer's market share and Firefox's (Firefox had the second highest market share over the whole period) in the EEA was on average 58.95% (and consistently over 20.9%). See Microsoft's reply to the Statement of Objections, at paragraphs 239 and 240. As regards the period running from November 2007 to October 2009, according to NetApplications data, the gap between Internet Explorer's and Firefox's market shares on the Windows platform was on average 34.41% (and consistently over 21.91%) in Europe. Microsoft "[...] considers NetApplications to be the most complete data source available" at a country level. See Microsoft's reply to the Statement of Objections, at paragraph 245.

- 4.4.1.2. The tying of Internet Explorer to Windows creates network effects with software developers and content providers
- (55) Web browsers constitute platform software because applications and content are developed for them. The Commission preliminarily considered that content providers and software developers look at installation and usage shares of web browsers when deciding under resource constraints on the basis of which technology to develop web applications or to create web content.
- Due to Internet Explorer being tied to the Windows client PC operating (56)system, content providers' and software developers' products which are tailored to Internet Explorer enjoy a potential audience which is equal to Microsoft's share of the client PC operating system market, that is to say, around 90% worldwide. As a consequence, the Commission preliminarily considered that Microsoft's tying of Internet Explorer to Windows provided web designers and software developers, which work under time and resource constraints, with an incentive to primarily target Internet Explorer, or at least not to develop only for other web browsers, which was unrelated to the relative merits of Internet Explorer and other web browsers. Due to the fact that Internet Explorer lagged behind its competitors in a number of areas and was the least standards-compliant of the main web browsers, the Commission took the preliminary view that the tying of Internet Explorer to Windows limited innovation in web development.
 - 4.4.1.3. The tying of Internet Explorer to Windows is liable to reinforce Microsoft's position in the client PC operating system market
- (57) The large-scale deployment of modern web applications poses a potential threat to the business of vendors of client PC operating systems such as Microsoft. Web browsers have the potential to partly replace the underlying client PC operating system(s) as the main tool for accessing and running such web applications. Many existing web applications can be accessed on various web browsers regardless of the underlying client PC operating system. The use of web applications therefore can reduce the dependency of customers on specific operating system platforms for running the applications they require. According to industry projections, the technical developments associated with Web 2.0 and in particular modern web-based applications will soon lead to a multi-billion Euro market of web-based services and applications that depend on web browsers as their gateways to customers and users. That development reinforces the threat that web browsers can pose to the Windows client PC operating system.
- (58) The Commission took the preliminary view that, through the tying of Internet Explorer to Windows, Microsoft countered the perceived "platform threat" from other web browsers because no application written specifically for Microsoft's web browser Internet Explorer, which is only available on Windows, would give its users an option to switch web browsers or even the underlying operating system.

4.5. Effect on trade between Member States

(59) In its Statement of Objections, the Commission considered that Microsoft's practices had an effect on trade between Member States given that client PC operating systems (to which Microsoft ties its web browser) are sold on a worldwide basis.

5. Proposed commitments

- (60) The key elements of the proposed commitments submitted by Microsoft on 7 October 2009 were as follows:
 - Microsoft undertook to make available a mechanism in Windows 7 and its successors within the EEA that enables OEMs and users to turn Internet Explorer off and on. If Internet Explorer is turned off, the browser frame window and menus would not be accessible in any way.
 - OEMs would be free to pre-install any web browser(s) of their choice on PCs they ship and set it as the default web browser. Microsoft undertook not to circumvent the proposed commitments by any means and not to retaliate against OEMs for installing competing web browsers.
 - Microsoft undertook to distribute a choice screen software update to users of a PC running Windows ("Windows PC") within the EEA by means of Windows Update. Windows XP, Windows Vista and Windows 7 users who have Internet Explorer set as their default web browser (no matter how this setting came about) and are subscribed to Windows Update would be prompted with this choice screen.
 - The choice screen would give users an opportunity to choose whether to install a competing web browser and, if so, which one(s). The choice screen would first display an introductory screen containing information about what web browsers are, and reminding the users to check that they are connected to the internet. Regardless of whether the users select the "OK" button or close the introductory screen, they would then be prompted with a screen in an Internet Explorer window where they can select which web browser(s) they want to download and install. The five main web browsers with the highest usage share, ordered alphabetically according to the vendor's company name, would be prominently displayed, and seven additional web browsers, also ordered alphabetically according to the vendor's company name, would be displayed if the user scrolls sideways. The list of the web browsers to be included in the choice screen would be updated every six months.
 - The choice screen would also provide a link to a web page explaining to users of Windows 7 how to turn off Internet Explorer.³⁵
 - When the choice screen update is launched in Windows 7, the Internet Explorer icon would automatically be unpinned from the task bar. The

While the choice screen is made available to all users of Windows XP, Windows Vista and Windows 7 where Internet Explorer is the default web browser, it is only technically possible for users to turn Internet Explorer off in Windows 7 (see recital (43) above).

choice screen would inform users of Windows 7 that the choice screen software update has unpinned the Internet Explorer icon and users can pin a browser (or other program) to the task bar.

- The choice screen would also contain a "select later" button which, if clicked, would trigger an automatic re-launch of the choice screen the next time the user logs on to Windows.
- Without prejudice to Article 9(2) of Regulation (EC) No 1/2003, Microsoft or the Commission would be able to request a review of the commitments two or more years after the adoption of any decision pursuant to Article 9(1) of Regulation (EC) No 1/2003, under certain conditions.
- The commitments would be binding for five years from the date of the adoption of any decision pursuant to Article 9(1) of Regulation (EC) No 1/2003. The choice screen software update would first be made available within a defined period thereafter.

6. Commission Notice Pursuant to Article 27(4) of Regulation (EC) No 1/2003

(61) In response to the publication of the Notice on 9 October 2009 (the "market test"), the Commission received 19 responses from interested third parties.

6.1. Summary of the main comments from third parties during the market test and from the Complainant

- (62) The large majority of the respondents (17 out of 19) did not question the concept of a choice screen allowing users to choose a web browser. A few respondents welcomed the proposed commitments. However, a large majority explained that in order for the proposed commitments to have the desired effectiveness, particular attention would have to be paid to implementation details.
- (63) In particular, almost all respondents pointed out that the effectiveness of the choice screen could be improved by not presenting the screen in an Internet Explorer window but, instead, in a more neutral environment. Many respondents also called for a more user-friendly design of the choice screen and made recommendations in that regard. Presentation and design were said not to have been implemented in the proposed commitments in a way that would avoid bias in favour of Internet Explorer. Those respondents also argued that, when presented with a choice, users generally have a preference for maintaining the status quo. Therefore users would tend to stick to Internet Explorer as the installed default web browser.
- (64) Several respondents to the market test emphasised that users with less technical knowledge might be confused by the security warning messages which would appear when downloading a web browser through the choice screen and that such messages could cause those users to abort the downloading process. Some respondents argued that the "ClickOnce" functionality, which allows for a reduction of the

number of security warning messages, would not adequately resolve that problem. A few respondents also warned of potential user confusion that might arise if a newly chosen web browser did not perform in the same way as Internet Explorer and if certain individual customizations were not automatically transferrable to the competing web browser.

- (65) Most of the respondents expressed concerns about the order in which the web browsers included on the choice screen would be displayed. It was pointed out that listing in alphabetical order according to vendor company names could create a bias in favour of the web browsers at the left position and the middle position. Therefore it was suggested that the web browsers should be displayed in a random order.
- (66) Some of the respondents argued that Internet Explorer should be turned off by default when Windows is shipped, that Internet Explorer should be turned off automatically once a user selects a competing web browser and that competing web browser vendors should be given the information required to turn off Internet Explorer.
- (67) Some of the respondents criticized both the absence of monitoring provisions and the review clause as being insufficient.
- (68) Some of the respondents called for an extension of the scope of the non-retaliation and anti-circumvention provisions and for a world-wide dissemination of the choice screen, as well as provision of the choice screen to users who do not have Internet Explorer set as default browser.
- (69) A number of respondents suggested that usage share may not be the most appropriate criterion for selecting the web browsers to be presented through the choice screen. Other criteria, such as a minimum number of downloads in a given period of time, industry polls, surveys, advice of an independent third-party or implementation of a rating system were proposed. Differing views were expressed as to the number of web browsers which should be displayed on the choice screen.
- (70) A few respondents recommended testing the choice screen before its general distribution. One OEM respondent argued that the choice screen would result in a burden on OEMs due to an increase in support costs and the lack of testing of the compatibility of web browsers that may be included in the choice screen with OEMs' PC platforms. According to that respondent, the choice screen did not contain sufficient warnings and information that competing web browsers were not supported by OEMs but only by their vendors.
- (71) In its response of 20 November 2009 to the Commission's letter of 23 October 2009, the Complainant, Opera, reiterated that it is "[...] essential that the ballot screen be presented without the cumbersome Internet Explorer user interface; that browsers on the screen be presented in a random order; that OEMs cannot, by pre-installing an alternative browser and thereby preventing the ballot screen from appearing at all, circumvent the ballot screen's purpose of providing

end-users with an unbiased choice of browser, and that an adequate monitoring and reporting mechanism be implemented."³⁶

6.2. The revision of the proposed commitments in the light of the market test and the Complainant's comments

- (72) In response to the comments received during the market test, Microsoft modified the proposed commitments and submitted the Commitments on 1 December 2009. The main changes are as follows:
- (a) Presenting the choice screen in a standard Internet Explorer environment was criticized by a number of respondents to the market test as being likely to introduce a bias in favour of Internet Explorer, and for providing unnecessary ways for the user to click away the choice screen (see above recital (63)). Under the Commitments, Microsoft commits to present the choice screen in a more neutral environment, namely in a window without Internet Explorer menus and controls, except for those included in the title bar, such as the minimize button, the maximize button and the close button. In view of those modifications the Commitments provide for a longer period for Microsoft to prepare the launch of the choice screen update (thirteen as opposed to eight weeks from the date of adoption of this Decision).
- (b) Some respondents also criticized the fact that the design of the choice screen as initially proposed by Microsoft was cluttered (see recital (63)). Under the Commitments the design of the choice screen is improved, by moving the text that Microsoft initially proposed to display below the web browsers options to other places.³⁷
- (c) A large number of the respondents to the market test also mentioned that Microsoft's proposal to display the two groups of web browsers populating the choice screen in a pre-determined order would introduce a bias in favour of the web browser in the left position and the one in the middle position. Under the Commitments the order in which the two groups of web browsers appear will be determined by randomization.
- (d) Microsoft's proposed commitments were also criticized because of the absence of a monitoring mechanism. Microsoft now commits to report to the Commission on the implementation of the Commitments six months after the date of the adoption of this Decision, and annually afterwards. In view of those reports, Microsoft undertakes to make adjustments to the implementation of the choice screen within the scope of the Commitments upon the Commission's request and where needed and proportionate to ensure the effective implementation of the Commitments.

Depending on the paragraphs, the text has either been moved from the second choice screen page (which lists the web browser options) to the introductory screen or to the screen which appears if the user clicks on the "further assistance" link.

Opera also stated that "[...] downloading and installing competing web browsers should not involve security warnings and confusing questions", that the choice screen should be presented "a reasonable number of times", and that the scope of the commitments should not be limited to the EEA. See Opera's Comments on the Commission's Letter of 23 October 2009, paragraphs 9, 12 and 17.

6.3. The Commission's assessment of the main comments in response to the market test and of the Complainant's comments

- (73) It is significant that the very large majority of respondents to the market test did not raise concerns as to the general suitability of the type of remedies put forward in the proposed commitments. The main focus of comments in response to the market test has been on improvements as regards the implementation of the proposed commitments to ensure their full effectiveness. Those comments will therefore be assessed in turn.
- (74) As regards the comment that the choice screen should not be presented in an Internet Explorer environment, Microsoft has, following the market test, amended the proposed commitments, as explained in recital (72). The Internet Explorer window through which the choice screen is presented will no longer display menus and controls. This means that all "clickable" items forming part of the Internet Explorer window are removed, except for the menu and controls of the Title Bar (such as the maximize, minimize, and close buttons). The only remaining visual trace of Internet Explorer is the non-prominent reference in the Title Bar and the URL location box. This represents only a small fraction of the overall page and is highly unlikely to prejudice the choice of the consumer. The concerns with respect to the Internet Explorer environment as voiced in the market test are thus addressed.
- (75) As regards the design of the choice screen, Microsoft has, following the market test, improved the design of the choice screen, as explained in recital (72). The choice screen strikes an appropriate balance between the need to properly inform users about available web browser options and the need to have a clear design to allow them to effectively exercise their choices.
- (76) Regarding the number of security warnings that users will encounter when downloading a web browser through the choice screen, the Commitments foresee that third-party web browsers can make use of the "ClickOnce" functionality in Windows. In any case, the choice screen is far more user friendly than normal downloading via the internet. In other words, even if the "ClickOnce" functionality does not overcome the issue of security warnings, users presented with the choice screen are less likely to be deterred from downloading than users who have to find and download a web browser by themselves from the internet. The choice screen contains a simple and short explanation of what web browsers are, as well as a description of the standard nature of the security warnings that may appear during download. The user should therefore feel more confident about downloading a web browser through the choice screen than outside it.
- (77) As regards the order in which browsers populating the choice screen will be presented, Microsoft has, following the market test, amended the proposed commitments, as explained in recital (72). Concerns regarding the appropriateness of the previously suggested alphabetical ordering have thereby been addressed.

- (78) Regarding review and monitoring, the review clause in paragraph 21 of the Commitments provides for a review two years after the adoption of this Decision where either (a) the market circumstances have fundamentally changed or (b) the choice screen has manifestly failed to provide consumers with an effective choice among browsers in a reasonable way. In view of the fact that most Windows XP and Vista users will be presented with the choice screen within five months of this Decision, and that the adoption of Windows 7 in the market will be gradual, the effects of the Commitments on the market may not be visible immediately. Moreover, the two-year review clause is without prejudice to the possibility of reopening the procedure as foreseen by Article 9(2) of Regulation (EC) No 1/2003. A period of two years is therefore an appropriate period before review of the Commitments.
- (79) Following the market test, Microsoft has also amended the proposed commitments, as explained in recital (72), by adding a reporting mechanism. That mechanism addresses concerns regarding the monitoring of the implementation of the Commitments and will assist the Commission in ensuring that Microsoft fully complies with this Decision. Microsoft has also committed to make adjustments to the choice screen within the scope of the Commitments upon the Commission's request and where proportionate and necessary in order to ensure the effective implementation of the Commitments. That mechanism will allow the Commission to make sure that appropriate improvements are made in the choice screen even before the expiry of the period of two years foreseen in the review clause.
- (80) With respect to the selection of web browsers to be included on the choice screen, it is appropriate to include the web browsers which have the largest usage share because this reflects general consumer preferences³⁸, as updated on a bi-annual basis.
- (81) Displaying five web browsers in a prominent manner, and seven more when the user scrolls sideways, strikes an appropriate balance between the need to have a workable choice screen that users are likely to make use of and making the choice screen as accessible as possible to web browser vendors. If the choice screen presented too many web browsers, users could be overwhelmed and as a consequence would be more likely not to exercise a choice at all, but rather to dismiss the entire choice screen.
- (82) Prominently displaying five web browsers and seven more when the user scrolls sideways reflects the market situation. The leading five web browsers are by far more widely accepted than the others by the market. Moreover, displaying seven additional web browsers gives web browsers with smaller usage share an opportunity to be included on the choice screen, and therefore to raise awareness about their products

According to NetApplications, in October 2009, the fifth web browser by usage share in Europe, namely Google Chrome, had a usage share of 3.8%, while the sum of the usage shares of all other less widely used web browsers totalled 0.45% (when excluding Netscape which is no longer supported and would therefore not be included on the choice screen).

With the exception of Internet Explorer, the market share of which the Commission preliminarily considered to be a consequence of it being tied to Windows.

and gain new users. Pursuant to the Commitments the methodology to select the web browsers to be included⁴⁰ on the choice screen is as follows:

- (a) Every six months, web browser usage share will be determined for each of the usage share sources listed in the annex to the Commitments by averaging monthly usage share data for the previous six months for which such data is available. All No more than one web browser will be listed per vendor.
- (b) A list of all web browsers that are included in at least two of the three usage share sources will be established.
- (c) The web browsers on that list will be ranked according to the arithmetic means of their numerical ranks in the usage share sources, taking into account their best ranking in two data sources ⁴²
- (d) If that procedure results in a list of more than twelve browsers, only the first twelve browsers will be included in the choice screen. Conversely, if the procedure results in a list of less than twelve browsers the remaining slots on the choice screen will be left empty.
- (83) Using several sources instead of one, and averaging rankings instead of usage shares, limits both the bias that may result from using only one data source, and measurement errors linked to the methodology used by each data source. Averaging the best rankings in two data sources prevents a web browser from being "penalized" for being tracked by more than two sources. 43
- (84) A revision of the list of the web browsers to be included on the choice screen every six months is appropriate in view of possible variations in web browser usage shares. That revision will ensure that web browsers which have gained traction in the market will be included in the choice screen.
- (85) With respect to the turning off of Internet Explorer by default when Windows is shipped, 44 the Commission considers that, while defaults are

Shares for different released versions of the same vendor's browsers will be added to determine a browser's total usage share (for example, Firefox 2.0, 3.0, 3.5, etc.) all count towards the total share for "Mozilla Firefox").

If a browser is included in three data sources, the two data sources where it was ranked highest should be used to calculate its arithmetic mean. If on the basis of that calculation more than one web browser would qualify for position 5 or 12 on the choice screen, the web browser with the highest arithmetic mean of its two highest usage shares in the data sources where it is included will be ranked in that position.

By way of example, consider two web browsers A and B and three data sources I, II and III. Assume that A ranks first in source I, third in source II, and tenth in source III, and that B ranks third in source I, first in source II and does not appear in source III. On the basis of the average rankings of A and B from all the sources in which they are mentioned, A would have an average of 4.6 and B an average of 2. Using only A's best two rankings, as foreseen in the Commitments, would give A and B the same average, namely 2.

It should be noted that it is only possible to turn Internet Explorer off in Windows 7 (see recital (43)).

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Those web browsers must be actively supported, and the provider must be willing to have its web browser included on the choice screen. Other than Internet Explorer, the choice screen will not contain any web browser which is based on Internet Explorer's rendering engine and the development or distribution of which is funded in whole or in substantial part by Microsoft.

generally considered to have a strong effect on user behaviour, the non-retaliation provisions protecting OEMs will allow OEMs in the present context to freely choose whether or not to leave Internet Explorer turned on and which web browser to pre-install on the PCs they ship. The Commission also considers that turning Internet Explorer off by default once the user has downloaded a competing web browser may confuse users who may, when downloading, merely wish to use an additional web browser but not necessarily (immediately) dispose of the one they are currently using.

- (86) As regards the scope of the anti-retaliation and anti-circumvention provisions, the Commitments are commensurate with the competition concerns identified in the Statement of Objections, namely those raised by the tying of Internet Explorer to Windows.
- (87) It is also appropriate to limit the distribution of the choice screen to users who have Internet Explorer set as the default web browser (as opposed to other web browsers) as the Commitments are intended to address the Commission's concerns regarding the tying of Internet Explorer to Windows. Extending the distribution of the choice screen to users who have competing web browsers set as the default browser would not address the competition problem provisionally identified by the Commission⁴⁵ and would have unintended effects on the competitive situation of rival web browsers which have been preinstalled by OEMs.
- (88) Limiting the distribution of the choice screen to users within the EEA having Internet Explorer set as default web browser is not inappropriate since the EEA is a large enough market for the Commitments to be implemented effectively.
- (89) With respect to concerns about resulting support costs for OEMs, it is for OEMs to establish a policy with regard to which software products they support and the way in which they want to respond to user queries regarding the choice screen. In any case, only one OEM raised such concerns.
- (90) As regards the alleged risk of user confusion resulting from the potential absence of certain forms of customization when a competing web browser is selected, such risks are inherent in the differences between competing products and are not attributable to the choice screen as such.
- (91) As regards the suggestion that the choice screen should be tested prior to its distribution, extensive and detailed market testing has preceded the adoption of this Decision.
- (92) Opera also claimed that the illegal tying would continue even if the Commitments were made binding on Microsoft and that the choice screen should appear more than once to the user.
- (93) In that respect, first, it must be recalled that in Windows 7, and in subsequent versions of Windows, OEMs will have the possibility to turn

Notably, there is no evidence that any of the vendors of those other web browsers are in a dominant position or are engaged in any anti-competitive tying practices.

off Internet Explorer. OEMs will thus be able to ship Windows with the web browser of their choice. In addition, users will also be able to turn Internet Explorer off. OEMs and users are therefore not coerced into shipping or using Internet Explorer with Windows 7. As explained in recital (101), it would be very difficult to turn Internet Explorer off in earlier versions of Windows and, in any case, new sales of those versions will be very limited in the future.

- (94) Second, the choice screen may in fact appear more than once, regardless of which version of Windows is involved. Specifically, the user may make use of the prominent "Select Later" button or the desktop shortcut, which will be installed by the choice screen software update, in order to revisit the choice screen. If the "Select Later" button is clicked, then the choice screen will launch automatically the next time the user logs on to Windows and this process will repeat itself for as long as the user decides to click on the "Select Later" button. That said, it must also be possible for the user to definitively dismiss the choice screen. Therefore if the users click away the choice screen, they will not be presented with the screen again. The Commission considers that presenting the choice screen more than once even if the users have expressly chosen to dismiss it would be intrusive.
- (95) It can thus be concluded that Opera, which made its comments before the proposed commitments were adjusted as a result of the market test, did not raise any facts or arguments that would lead the Commission to modify its assessment of the Commitments in their final form.

7. Proportionality of the Commitments

(96) According to settled case law, the principle of proportionality requires that the measures adopted by institutions of the European Union must not exceed what is appropriate and necessary for attaining the objective pursued. Where there is a choice between several appropriate measures, recourse must be had to the least onerous one, and the disadvantages caused must not be disproportionate to the aims pursued. For the assessment of the proportionality of commitments submitted within the framework of Article 9 of Regulation (EC) No 1/2003, the Commission takes into account that the Commitments are not imposed by the Commission for an established infringement under Article 7(1) of Regulation (EC) No 1/2003, but are voluntarily proposed by the undertaking seeking to bring the procedure to an end without a formal decision on the existence of an infringement.

Case T-260/94 Air Inter v Commission [1997] ECR II-997, at paragraph 144, and Case T-65/98 Van den Bergh Foods v Commission [2003] ECR II-4653, at paragraph 201.

Case 265/87 Schräder [1989] ECR 2237, at paragraph 21, and Case C-174/05 Zuid-Hollandse Milieufederatie and Natuur en Milieu [2006] ECR I-2243, at paragraph 28.

Even if one accepts that the assessment of proportionality under Article 9 is exactly the same as that under Article 7 of Regulation (EC) No 1/2003 (see Case T-170/06 *Alrosa v Commission* [2007] ECR II-2601, paragraphs 101, 103, 104 and 140; see, however, for a contrary view the Opinion of Advocate General Kokott of 17 September 2009 in Case C-441/07 P *Commission v Alrosa*, paragraphs 48 to 62), the Commission considers that the Commitments are proportionate in this case.

- (97) The Commission takes the view that the Commitments are appropriate and necessary to address the concerns identified in the Statement of Objections. In assessing the main comments in response to the market test and the Complainant's submissions, the Commission has already indirectly examined certain elements of the proportionality of the Commitments. However, recitals (98) to (112) set out the Commission's main points in this regard.
- (98) The Commitments are appropriate as they address the Commission's competition concerns regarding potential foreclosure effects, the limitation of innovation in web development through the tying of Internet Explorer to Windows, and the potential reinforcement of Microsoft's position on the client PC operating system market.
- (99) Pursuant to the Commitments, Microsoft will no longer contractually oblige OEMs to ship Internet Explorer with Windows PCs.
- (100) Microsoft will also not retaliate against OEMs for installing competing web browsers. As explained in recital (85), OEMs will therefore be able to freely choose between competing offerings as regards the web browsers to be installed on the PCs which they ship. The Commitments therefore meet the preliminary concerns of the Commission, as expressed in the Statement of Objections, with respect to the coercion of OEMs.
- (101) Moreover, Microsoft will allow OEMs to turn off Internet Explorer in Windows 7 and subsequent versions of Windows and provide the technical means to do so. In this regard, it would be technically very difficult to turn Internet Explorer off in earlier versions of Windows (XP and Vista). In any case, new sales of those versions in the EEA are likely to be very limited in the future compared to those of Windows 7.
- (102) Users will also be able to turn Internet Explorer off in Windows 7. For the reasons set out in recital (101), the Commission does not consider that it is material that users will not be able to turn Internet Explorer off in previous versions of Windows.
- (103) Furthermore, as explained in recital (88), under the Commitments, the choice screen will be presented by Microsoft to a very large number of Windows users essentially covering: (a) all users of newly purchased PCs within the EEA which have Internet Explorer set as the default browser and (b) all existing users within the EEA who have Internet Explorer as a default browser, provided they subscribe to Windows Update. It is thereby ensured that the choice screen will reach the vast majority of current and future Windows users in the EEA in an effective way. Through the medium of the choice screen, those users will have a specific opportunity to choose and install competing web browsers. Importantly, the users will be able to make that choice in an informed manner and in a technically straightforward environment. It is appropriate to limit the distribution of the choice screen to users who have Internet Explorer set as the default browser as opposed to other web browsers as explained in recital (87).

- (104) The distribution of the choice screen through Windows Update requires minimum user activity for the choice screen to reach the user and does not necessitate the involvement of third parties in distributing competing web browsers which could in and of itself jeopardize the effectiveness of the measure. The Commitments are therefore suitable for providing rival web browsers with an effective opportunity to compete on the merits with Internet Explorer and for enhancing competition on the web browser market by removing Microsoft's artificial distribution advantage and by informing users about available web browser choices. The Commitments will carry benefits for consumers by improving choice and encouraging innovation.
- (105) It follows that the Commitments remove the Commission's concerns with respect to the potential artificial distribution advantage for Microsoft in the web browser market brought about by the tying of Internet Explorer to Windows.
- (106) Enhanced competition in the web browser market which could result from the implementation of the Commitments would also substantially weaken the network effects that the Commission preliminarily identified in the Statement of Objections as currently favouring Internet Explorer.
- (107) More competition should also lead to a more widespread use of web browsers which run on multiple operating system platforms. This would in turn contribute to weakening the network effects in favour of Windows, the only operating system on which Internet Explorer runs. The implementation of the Commitments would therefore also address the Commission's preliminary concerns regarding the reinforcement of Microsoft's position in the client PC operating system market.
- (108) The Commission also considers that the Commitments are necessary as there is no equally effective but less onerous remedy known to it.⁴⁹ Specifically with respect to third parties, there is no evidence showing that the Commitments would have adverse effects on their interests.
- (109) The interests of OEMs are not unduly affected by the Commitments. There is, in particular, no obligation imposed on them to undertake any steps in the distribution of the choice screens let alone of competing web browsers themselves. Should OEMs perceive a commercial need to provide support and respond to user queries in relation to the implementation of the Commitments and thereby incur costs, such a need would fall under the risks that must be borne by any economic operator in an open market economy.
- (110) Moreover, the Commitments do not unduly affect the interests of vendors of web browsers. On the contrary, inclusion on the choice screen would be an additional means for them to gain market share. In any case, if a vendor does not wish to have its web browser included in the choice screen, that browser will not be included.

See the Opinion of Advocate General Kokott of 17 September 2009 in Case C-441/07 P *Commission v Alrosa*, paragraphs 55-56. See also Case T-170/06 *Alrosa v Commission* [2007] ECR II-2601, paragraph 131.

- (111) As explained in recitals (78) and (79), the Commission also considers that the two year review clause in the Commitments, as supplemented by the reporting mechanism, is appropriate in the circumstances of this case. The Commission considers the preparatory period of thirteen weeks referred to in point (a) of recital (72) appropriate, especially in view of the fact that the roll-out to all current Windows XP and Windows Vista users has to be essentially completed within 5 months after adoption of this Decision and thus within a relatively short period considering the large number of users concerned.
- (112) The Commitments will be made binding on Microsoft for a total period of five years. That period is adapted to a fast-evolving industry, where the functionality and use of the products may significantly change within short time frames. However, it is long enough to remedy what the Commission preliminarily considered to be a long standing abuse, and to present most Windows users in the EEA with a choice of web browsers. The Commission preliminarily found that many users are not sufficiently informed about web browsers and the fact that non-Microsoft web browsers can be downloaded. The Commission considers that a period of time is necessary to give users the possibility to inform themselves and to exercise choice and for those choices to have an impact on the market. It is therefore concluded that a period of five years is proportionate.

8. CONCLUSION

- (113) By adopting a decision pursuant to Article 9(1) of Regulation (EC) No 1/2003, the Commission makes commitments, offered by the undertaking concerned to meet the Commission's concerns expressed in its preliminary assessment, binding upon them. Recital 13 of the Preamble to Regulation (EC) No 1/2003 states that such a decision should not conclude whether or not there has been or still is an infringement. The Commission's assessment of whether Commitments offered are sufficient to meet its concerns is based on its preliminary assessment, representing the preliminary view of the Commission based on the underlying investigation and analysis as expressed in the Statement of Objections, complemented by the Letter of Facts. It takes into account the observations received from third parties following the publication of a notice pursuant to Article 27(4) of Regulation (EC) No 1/2003.
- (114) In the light of the Commitments offered, the Commission considers that there are no longer grounds for action on its part and, without prejudice to Article 9(2) of Regulation (EC) No 1/2003, the proceedings in this case should therefore be brought to an end.
- (115) The Commission retains full discretion to investigate and open proceedings under Article 102 of the TFEU and Article 54 of the EEA Agreement as regards practices that are not the subject matter of this Decision,

HAS ADOPTED THIS DECISION:

Article 1

The Commitments in the Annex shall be binding on Microsoft Corporation for five years from the date of adoption of this Decision.

Article 2

It is hereby concluded that there are no longer grounds for action in this case.

Article 3

This Decision is addressed to:
Microsoft Corporation,
One Microsoft Way,
USA – Redmond, WA 98052-6399

Done at Brussels, 16.12.2009

For the Commission
Neelie Kroes
Member of the Commission

ANNEX THE COMMITMENTS

COMMITMENTS

Microsoft gives the following Commitments (the "Commitments") to address the competition concerns identified by the European Commission (the "Commission") in Case No. COMP/C-3/39.530. Those concerns are laid out in the Statement of Objections of 14 January 2009 (the "Statement of Objections") and are based on the Commission's interpretation of Article 102 of the Treaty on the Functioning of the European Union ("TFEU") (previously, Article 82 of the Treaty establishing the European Community) and the judgment of the General Court (previously, the Court of First Instance) of 17 September 2007 in Case T-201/04 Microsoft v Commission.

These Commitments are made without prejudice to Microsoft's position should the Commission conduct proceedings or commence any other legal action concerning the objections identified in the Statement of Objections against Microsoft. Nothing in these Commitments may be construed as implying that Microsoft agrees with the Commission's preliminary assessment in the Statement of Objections of 14 January 2009 in Case No. COMP/C-3/39.530. Microsoft has, nevertheless, offered these Commitments pursuant to Article 9 of Council Regulation (EC) No 1/2003 ("Regulation 1/2003") to address the Commission's competition concerns. These Commitments are given without any admission by Microsoft that it has engaged in abusive conduct contrary to Article 102 of the TFEU or any other aspect of EU competition law.

1. COMMITMENTS WITH REGARD TO BROWSER CHOICE

- (1) Microsoft will make available a mechanism in Windows Client PC Operating Systems¹ within the European Economic Area ("EEA") that enables OEMs and end users to turn Internet Explorer off and on. If Internet Explorer is turned off, what the user considers as the web browser Internet Explorer, namely its browser frame window and menus (user interface), will not be accessible and will not otherwise launch programmatically. Microsoft will ensure that if Internet Explorer is turned off, then (i) it can only be turned on through user action specifically aimed at turning on Internet Explorer; (ii) the user interface cannot be called upon by applications; and (iii) no icons, links or shortcuts or any other means will appear within Windows to start a download or installation of Internet Explorer. Microsoft will maintain a web page on www.microsoft.com that explains how users can turn Internet Explorer on and off, and will maintain that page so that other browser vendors can link to it if they wish. Annex A sets out the technical implementation of the turning off of Internet Explorer in Windows 7.
- OEMs will be free to pre-install any web browser (or browsers) of their choice on PCs they ship and to set any browser as the default web browser.

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Section 5 below contains a list of defined terms.

- (3) Within Microsoft's PC Productivity Applications distributed in the EEA, Microsoft shall not include any icons, links or short-cuts or provide any other means to start a download or installation of Internet Explorer. Microsoft shall not use Windows Update to offer any new version of Internet Explorer to users within the EEA unless Internet Explorer is turned on on the user's computer. Microsoft may use Windows Update, however, to update those portions of Internet Explorer other than the browser frame window and menus. Windows Client PC Operating Systems shall enable end users to choose their preferred default web browser. Windows Client PC Operating Systems, including Windows Update, and Internet Explorer, shall not override the user's choice of default web browser.
- Microsoft shall not in any way retaliate against any OEM for developing, using, distributing, promoting or supporting software that competes with Internet Explorer, in particular by altering Microsoft's commercial relations with that OEM, or by withholding Consideration. Without prejudice to the application of EU competition law, nothing in these Commitments shall prohibit Microsoft from providing Consideration to any OEM with respect to Internet Explorer where that Consideration is commensurate with the absolute level or commercial value of that OEM's development, distribution, promotion, or licensing of that web browser.
- (5) Microsoft shall not enter into any agreement with an OEM that links or conditions the grant of any Consideration on the OEM's refraining from developing, using, distributing, promoting or supporting any software that competes with Internet Explorer. Without prejudice to the application of EU competition law, nothing in these Commitments shall prohibit Microsoft from entering into an agreement with an OEM for any joint venture that limits the development, use, distribution, promotion or support of the jointly developed web browser technology to use with or in a Windows Client PC Operating System or Internet Explorer.
- (6) Microsoft shall not terminate a direct OEM license for Windows Client PC Operating Systems without having first given the OEM written notice of the reasons for the proposed termination and not less than thirty days' opportunity to cure. Notwithstanding the foregoing, Microsoft shall have no obligation to provide such a termination notice and opportunity to cure to any OEM that has received two or more similar justified notices during the term of its license.

2. COMMITMENTS WITH REGARD TO A BROWSER CHOICE SCREEN

(7) These Commitments are designed to ensure the provision by Microsoft of a Choice Screen to give those users who have Internet Explorer set as their default web browser an opportunity to choose whether and which competing web browser(s) to

install in addition to the one(s) they already have in a fair and unbiased way. Microsoft will distribute a Choice Screen software update to users within the EEA of Windows XP, Windows Vista and Windows Client PC Operating Systems, by means of Windows Update as described hereafter: A software update enabling the Choice Screen to be displayed will be made available to all current and future users of Windows XP and Windows Vista who receive updates from Windows Update. For Windows XP and Windows Vista users the Choice Screen update will first be made available thirteen weeks after the adoption of the Commission's decision under Article 9 of Regulation 1/2003 (with the roll-out to all current Windows XP and Windows Vista users being essentially completed within 5 months after adoption of the Commission's decision under Article 9 of Regulation 1/2003) and remain in place for distribution according to paragraph 9 for the entire duration of these Commitments. If Microsoft encounters objective unexpected technical difficulties which mean that it is unable to complete the full roll-out within 5 months, Microsoft will before the end of this period submit a reasoned request for an extension to the Commission. Such extension shall not be unreasonably refused. For Windows 7, the Choice Screen update will first be made available to users thirteen weeks after the adoption of the Commission's decision under Article 9 of Regulation 1/2003 and remain in place for distribution according to paragraph 9 for the entire duration of these Commitments. For Windows Client PC Operating Systems after Windows 7, the Choice Screen update will first be made available at the general commercial release date of such an operating system and remain in place for distribution according to paragraph 9 for the entire duration of these Commitments.

(8) The Choice Screen update will include an initial page that provides basic information concerning the purpose of the Choice Screen. This page will include a notice that prominently reminds the user to ensure an active internet connection before proceeding to the browser selection page. An initial information page substantially in the form of Annex B will satisfy the stipulations as to the appearance of this screen in these Commitments. Microsoft will design the second Choice Screen page to display next, regardless of whether the user selects "OK" or closes the initial information page, and provide two links associated with each web browser. An "install" link will connect to a vendor-managed distribution server, which, upon the user's confirmation, can directly download the installation package of the selected web browser (and only a web browser, including software to update the web browser only) for local execution. The resulting situation will therefore be equivalent to a scenario in which the user had directly downloaded and executed the installation package without being aided by the Choice Screen. To the extent controllable by Microsoft, installation will not involve more security warnings than applicable under the standard Windows security architecture. Microsoft will maintain the "ClickOnce" functionality in Windows for the duration of these Commitments. An "information" link will connect to a vendor-managed web page from which the vendor can offer users more information about its browser and installation options. Users will be able to select one or more of the web browsers offered through the Choice Screen. Microsoft shall ensure that in a link from the Choice Screen users will be informed in an unbiased way that they can turn Internet Explorer off.

- (9) In accordance with paragraph 8, the Choice Screen software update will be distributed and installable via Windows Update in a manner that is designed to bring about installation of this update at a rate that is as least as high as that for the most recent version of Internet Explorer offered via Windows Update. For Microsoft's current operating system releases, the Choice Screen software update will be distributed and installable via Windows Update at the priority level "Important" for Windows Vista and Windows 7 users and "High Priority" for Windows XP users. The update will be installed automatically for users who have opted for automatic installation of updates via Windows Update. Once the software update with the Choice Screen is installed and the user logs on to the computer the next time, users who have Internet Explorer set as their default web browser will be prompted with the Choice Screen in the language designated in the users' settings in Internet Explorer and it can be used immediately. The software update will also install a desktop shortcut for the Choice Screen. The Choice Screen will include a "Select Later" button that, if clicked, will cause the Choice Screen to launch automatically the next time the user logs on to Windows. The Choice Screen shall be presented in the form of a Web site maintained by Microsoft and updated from time to time as described below. The Internet Explorer window through which the Choice Screen is presented shall display no more than the following elements of the Internet Explorer user interface: a Title Bar and a URL location box, as shown in Annex C. Microsoft may offer tools to volume license users that prevent the Choice Screen update from being installed on all computers covered by the licence. At the same time, it will remain possible for users to manually install web browsers in the same way that other software is installed on top of Windows.
- (10) Nothing in the design and implementation of the Choice Screen and the presentation of competing web browsers will express a bias for Internet Explorer or any other web browser or discourage the user from downloading and installing additional web browsers via the Choice Screen and making a web browser competing with Internet Explorer the default. When the Choice Screen is launched in Windows Client PC Operating Systems, the Internet Explorer icon will automatically be unpinned from the task bar. Microsoft may inform users of Windows XP, Windows Vista, and Windows Client PC Operating Systems, as

- applicable, on the initial information page using no more than three sentences that (a) the Choice Screen software update has unpinned the Internet Explorer icon, (b) users can easily pin a browser (or other program) to the task bar, and (c) Internet Explorer is still available from Start/All Programs.
- (11) The Choice Screen will be populated with the 12 most widely-used web browsers that run on Windows 7 according to a ranking based on usage share in the EEA as measured semi-annually (see the methodology set out in paragraph 14). In addition, if a browser's usage share is ranked among the top 12, but that browser is no longer actively offered by its vendor, that browser will not be included in the Choice Screen. If a browser vendor does not wish to have its browser included in the Choice Screen, that browser will not be included.
- (12) The Choice Screen will in a horizontal line and in an unbiased way display icons of and basic identifying information on the web browsers. A Choice Screen substantially in the form of Annex C will satisfy the stipulations as to the appearance of the second Choice Screen page referred to in these Commitments and in particular paragraphs 8 through 13.
- (13) The Choice Screen will prominently display the Final Releases of the five highest ranked web browsers based on usage share in the EEA (*i.e.* only these browsers will be immediately visible without requiring any user action under typical user settings). These five web browsers will be displayed in random order each time the Choice Screen is presented. The remaining seven browsers will be displayed if the user scrolls sideways and will also be displayed in random order.
- For each of the usage share sources listed in Annex D, web browser usage share (14)will be determined semi-annually by averaging monthly usage share data for the previous six months for which such data is available, with shares for different released versions of the same vendor's browsers added together to determine a browser's total usage share (e.g., Firefox 2.0, 3.0, 3.5, etc. all count towards the total share for "Mozilla Firefox"). No more than one browser will be listed per vendor. Other than Internet Explorer, the Choice Screen may not contain any web browser which is based on Internet Explorer's rendering engine and the development or distribution of which is funded in whole or in substantial part by Microsoft. The list of the web browsers to be included on the Choice Screen will be determined as follows: First, a list of all web browsers will be established that both, meet the criteria laid down in paragraph 11 and are included in at least two of the three data sources of usage share information for web browsers listed in Annex D. Secondly, the browsers on this list will be ranked according to the arithmetic means of their numerical ranks in the data sources, taking into account their best ranking in two data sources (i.e. if a browser is included in three data sources, the two data

sources where it was ranked highest should be used to calculate its arithmetic mean).² Thirdly, if this procedure results in a list of more than 12 browsers, only the first 12 browsers will be included in the Choice Screen. Conversely, if this procedure results in a list of less than 12 browsers the remaining slots on the Choice Screen will be left empty. Microsoft undertakes to provide the Commission every six months with documentation of the application of the mechanism as described above, as well as with the resulting list of web browsers to be included in the Choice Screen during the subsequent six months.

- (15) Any web browser vendor selected will be invited to provide Microsoft with two uniform resource locators ("URLs") (see also paragraph (8) above). One URL shall be an "information" URL that will link to a web page that provides relevant information only about that vendor's browser, together with installation options. The other URL shall be an "install" URL that, at the vendor's option, will either (a) link to a web page with instructions for installing its browser and a means to initiate a download of its browser, and no additional software, or (b) directly initiate a download of its browser, and no additional software. If any dispute arises as to the application of this paragraph which, despite best efforts, the parties to that dispute cannot resolve themselves within a reasonable period of time, Microsoft may submit the matter to the Commission for determination.
- (16) Microsoft will provide for a means for the contents of the Choice Screen, *i.e.* the descriptions of the web browsers and their icons as well as the URLs provided by web browser vendors, to be updated monthly (as noted in paragraph 14 above, the list of the 12 browsers populating the Choice Screen will be updated every six months). This mechanism will stay in place throughout the term of these Commitments.
- Microsoft will ensure that all the Windows APIs on which Internet Explorer relies are disclosed in a complete, accurate and Timely Manner, so that non-Microsoft web browser suppliers will not be at a competitive disadvantage compared to Microsoft when designing a web browser for Windows. For purposes of this paragraph, Internet Explorer consists of the code that is distributed separately from Windows and trademarked or marketed as Internet Explorer. Microsoft will bear the costs of the technical implementation of the remedy in Windows and shall not charge for the inclusion of a third party web browser in the Choice Screen.

If on the basis of this calculation more than one web browser would qualify for position 5 or 12 on the Choice Screen, the web browser with the highest arithmetic mean of its two highest usage shares in the data sources where it is included will be ranked on that position.

3. COMMITMENTS WITH REGARD TO NON-CIRCUMVENTION

- (18) These Commitments are intended to allow for an unbiased choice between Internet Explorer and competing web browsers for both OEMs and end users. Microsoft will not in any way circumvent or attempt to circumvent these Commitments.
- (19) For Windows Vista and successors, Microsoft shall ensure that access and the full functioning of the Windows Update online service (currently available at www.update.microsoft.com) are not dependent on the use of the Internet Explorer user interface.

4. TERM, REVIEW AND REPORTING

- (20) The term of these Commitments shall be 5 years from the date of the adoption of the Commission's decision under Article 9 of Regulation 1/2003.
- (21) In addition and without prejudice to the general provision of Article 9(2) of Regulation 1/2003, Microsoft or the Commission may request a review of these Commitments two years or later after the adoption of the Commission's decision under Article 9 of Regulation 1/2003 where either (i) the market circumstances have fundamentally changed or (ii) the Choice Screen has manifestly failed to provide consumers with an effective choice among browsers in a reasonable way. Microsoft will not unreasonably withhold its cooperation to such a review.
- Microsoft shall provide the Commission with a detailed report on the implementation of these Commitments six months after the date of adoption of the Commission's decision under Article 9 of Regulation 1/2003 and thereafter annually each December. This report will in particular address progress and difficulties in the course of the implementation of the Commitments, complaints raised with Microsoft by third parties in the context of this implementation and the uptake of the Choice Screen by users. Reporting on the latter shall be based on quantitative indicators such as the following: Number of users who have received the Choice Screen software update, number of page views for the Choice Screen, and number of clicks on each of the URL buttons and links provided by the Choice Screen. In view of these reports, and without prejudice to paragraph 21, Microsoft commits to make adjustments to the Choice Screen within the scope of these Commitments upon the Commission's request and where proportionate and necessary in order to ensure the effective implementation of these Commitments.
- (23) If for any good cause the use of a usage share source listed in Annex D is no longer appropriate Microsoft shall modify the usage share sources listed in Annex D upon a request by the Commission or on its own initiative in agreement with the Commission. If the Commission and Microsoft do not agree on the appropriateness

of the usage share sources listed in Annex D, the Commission will provide Microsoft with the source to use. Any change in the Choice Screen resulting from such modification will be implemented by Microsoft within two months after the modification came into effect.

5. **DEFINITIONS**

"ClickOnce functionality" means Microsoft's Windows deployment technology that allows developers to create self-updating Windows-based applications that can be installed and run with minimal user interaction, as described at http://msdn.microsoft.com/en-us/library/142dbbz4(VS.80).aspx.

"Consideration" is the value provided by a party entering into contractual obligations and includes any monetary payment, discount or the provision of preferential licensing terms; technical, marketing, and sales support; enabling programs; product information; information about future plans; developer support; hardware or software certification or approval; or permission to display trademarks, icons or logos or any other preferential treatment.

"Internet Explorer" means any of the software products marketed, distributed and licensed by Microsoft as Internet Explorer 6, Internet Explorer 7 and Internet Explorer 8, including Service Packs and Updates thereto, and their successors as well as any other Microsoft web browsers released in the future irrespective of the name or trademark they are marketed under (including Service Packs and Updates thereto).

"Final Release" means a generally available version of a software product, i.e. one that is no longer being tested in alpha or beta stage.

"Microsoft's PC Productivity Applications" means any of the software products marketed, distributed and licensed by Microsoft in Microsoft Office 2007 (which includes Word 2007, Excel 2007, PowerPoint 2007, Outlook 2007, Publisher 2007, Office Accounting Express 2007, Access 2007, Groove 2007, OneNote 2007, InfoPath 2007, and Office Communicator 2007, including Service Packs and Updates thereto, or their successors (including Service Packs and Updates thereto)).

"OEM" means an original equipment manufacturer of personal computers.

"Title Bar" means the bar at the top of the web browser window which only contains the following items: the web browser icon, the title of the web browser window, the minimize button, the maximize button and the close button.

"Timely Manner" means as soon as Microsoft has developed a sufficiently stable "beta" testing version of Windows (including Service Packs and Updates) and has made this implementation available to third parties for testing purposes for the first time. This does not include pre-release versions that under standard industry understanding and past Microsoft practice would not constitute a sufficiently stable version to be labelled a "beta".

"Windows Client PC Operating System" ("Windows") means any of the software products marketed, distributed and licensed by Microsoft as Windows 7 including Service Packs and Updates thereto, or their successors (including Service Packs and Updates thereto).

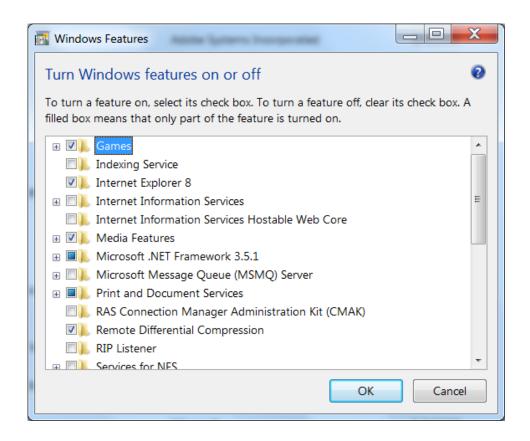
"Windows Update" refers to the services in Windows XP, Windows Vista and Windows 7 that enable the user's PC to "call back" to a Microsoft-operated server in order to check for available updates for Windows Client PC Operating Systems and to download and install applicable updates if the user agrees.

Duly authorised for and on behalf of Microsoft Corporation
Bradford L. Smith
Name
Senior Vice President, General Counsel,
Microsoft Corporation
Position
December 1, 2009
Date

ANNEX A

Paragraph 1 of these Commitments describes Microsoft's obligation to provide a means to enable OEMs and users to turn Internet Explorer on and off. This annex describes how this obligation will be satisfied in Windows 7.

Windows 7 includes a Control Panel feature called "Turn Windows features on or off." OEMs and computer users (and administrators) may use this feature to turn Internet Explorer on or off. Here is a screenshot of this feature, showing Internet Explorer turned on.



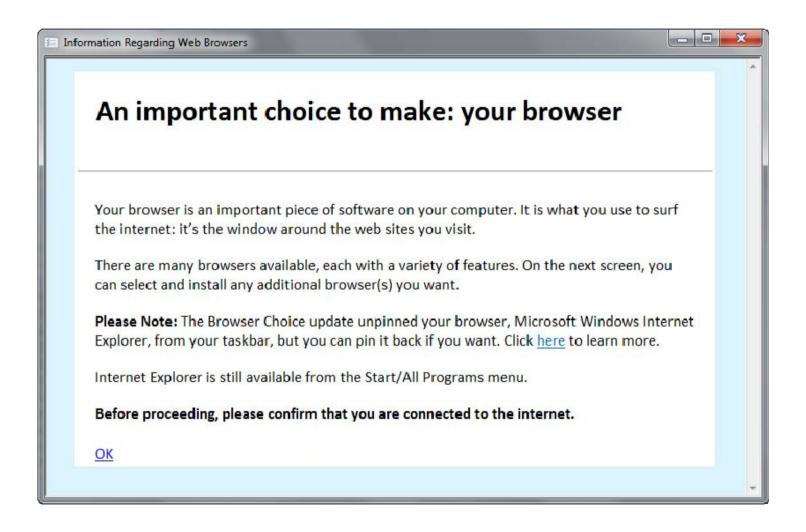
A user can turn Internet Explorer off by unchecking the box. (OEMs will have software tools to do so.) If Internet Explorer is turned off, it is not available for use. As implemented in Windows 7, this means that certain files that are essential to the operation of Internet Explorer (without which it cannot run) are not loaded by the operating system and thus not available to users on the computer. These files, which include the main Internet Explorer executable, the browser frame window and associated menus, are not available to other programs (or other parts of Windows) either, and thus they cannot be called upon in any scenario. This means that Internet Explorer cannot be launched for any reason, even if no other

browser is available on the system. Internet Explorer can be launched only if the user subsequently decides to turn it back on (by re-checking the appropriate box, as shown above).

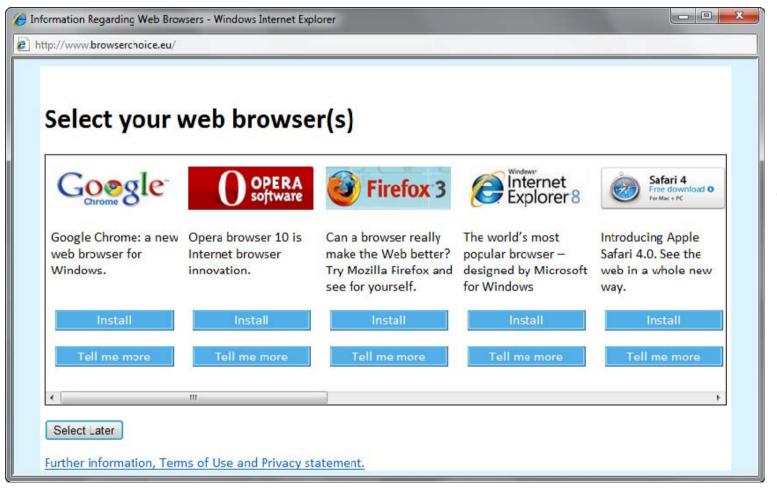
The Internet Explorer files referred to above are removed to a separate storage location as a backup copy so that a user can turn Internet Explorer back on, if the user wishes to do so. If the user turns Internet Explorer on, the files are restored to the operating system.

When Internet Explorer is turned off using this feature there is minimal impact on third-part programs (and other parts of Windows itself) that call upon Internet Explorer APIs. This is because the Internet Explorer files that provide functionality to third parties and other parts of Windows through APIs are left intact when Internet Explorer is turned off.

Annex B



Annex C



Browser order presented randomly

ANNEX D

List of the data sources referred to in paragraph 14

ComScore

NetApplications

StatCounter