

An analysis of the IBM Commitment Decision concerning the aftermarket for IBM mainframe maintenance

by Fabio Domanico, Michela Angeli¹

Introduction

The Information Technology industry is one of the key drivers of the economy. Given the importance of this industry, it is vital that competition authorities closely monitor the behaviour of players in IT markets in order to detect any anti-competitive conduct.

In July 2010, the Commission initiated proceedings against International Business Machines ("IBM"), pursuant to Article 11(6) of Council Regulation (EC) No 1/2003 and Article 2(1) of Commission Regulation (EC) No 773/2004. Following its initial investigation² of the aftermarket for IBM mainframe computer ("Mainframes") maintenance, the Commission preliminarily concluded that IBM might: (i) hold a dominant position on the market for certain inputs required to provide maintenance services for IBM mainframe hardware and operating system software products; and (ii) have imposed unreasonable supply conditions, with regard to these inputs, on its competitors in the maintenance market, thus putting them at a competitive disadvantage.

On 13 December 2011 the Commission adopted a commitment decision (the "Decision")³ on the basis of Article 9 of Regulation (EC) No 1/2003 ("Article 9").

This article provides an overview of the Decision and explains how the commitments offered by IBM adequately and timely addressed the Commission's preliminary competition concerns in the aftermarket for IBM mainframe maintenance.

The Procedure

The Commission opened proceedings on 24 July 2010. As a result, in December 2010 IBM informed the Commission that it had taken steps to modify the conditions under which it made the relevant inputs available to third party maintainers ("TPMs") of IBM Mainframes; however, because of their unilateral character, IBM's declarations were not enforceable by TPMs (see below). For this reason, the Commission considered that IBM's unilateral declarations did not obviate the need for formal commitments pursuant to Article 9. Therefore, on 1 August 2011 the

¹ The content of this article does not necessarily reflect the official position of the European Commission. Responsibility for the information and views expressed lies entirely with the authors. The authors would like to thank Mr Thomas Kramler, Deputy Head of Unit C3, for his valuable comments, and Miss Cora Wadsworth for her assistance on the first draft of this article.

² In parallel, the Commission examined allegations of alleged tying of IBM's mainframe hardware with its operating system following complaints made by rival software vendors T3 and Turbo Hercules and a related later complaint by Neon Enterprise Software. Following an in-depth investigation of these allegations, on 20 September 2011, the Commission decided to close these proceedings. The three complaints have been withdrawn.

³ Summary of Commission Decision of 13 December 2011 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/39.692 — IBM Maintenance Services), OJ C18, 21.01.2012, p. 6. The full text of the Decision is available at: http://ec.europa.eu/competition/antitrust/cases/dec_docs/39692/39692_1304_3.pdf.

Commission addressed a preliminary assessment (the "Preliminary Assessment") to IBM setting out the Commission's concerns that IBM may have abused its dominant position. On 14 September 2011, in response to the Preliminary Assessment, IBM submitted commitments with a view to formalising changes in its supply policy toward TPMs. On 20 September 2011, a notice pursuant to Article 27(4) of Regulation (EC) No 1/2003 was published in the Official Journal of the European Union, summarising the case and IBM's proposed commitments and inviting interested third parties to submit their observations on the commitments within one month⁴. Following the market test, on 24 October 2011, IBM submitted a slightly amended set of proposed commitments to address certain of the issues raised with the Commission by interested third parties. On 13 December 2011, less than eighteen months after the opening of proceedings, the Commission adopted the Decision rendering IBM's commitments binding pursuant to Article 9.

Relevant markets

IBM's behaviour at issue related to inputs required to provide maintenance services for IBM Mainframes. Mainframes are powerful computers used by large companies and government institutions worldwide to store and process critical business information. Due to their high reliability, availability and serviceability, mainframes are commonly used to run mission-critical business processes. They are designed to ensure business continuity and so their expeditious maintenance is essential.

Maintenance services for IBM mainframes are offered by both IBM and TPMs. TPMs are companies that offer maintenance services for IBM mainframes and other third-party servers but are not affiliated with, or authorised by, IBM itself. Since TPMs are generally smaller undertakings and active on local markets, their combined share of the IBM mainframe maintenance market is modest compared to that of IBM itself⁵.

Different product markets were preliminarily identified in the Decision. There is a primary market for large corporate servers, on which IBM sells its mainframes. IBM System z is today's current line of Mainframes and is comprised of different product families⁶. In addition, two relevant aftermarkets adjacent to the primary market were also considered in the Decision. The first adjacent market was that for those inputs required for the maintenance of IBM Mainframes which only IBM can supply. The second possible adjacent product market considered by the Commission was the provision of IBM mainframe hardware and operating system software maintenance services. IBM inputs required for maintenance of IBM Mainframes are necessary in the downstream market for maintenance services.

Whether the aftermarkets for IBM's inputs and maintenance services for Mainframes constitute separate product markets or are part of a single market for "systems" depends largely on the likely reaction of customers to moderate price increases in the aftermarkets⁷.

⁴ OJ L 275, 20.09.2011, page 8-9.

⁵ IBM estimates that, depending on the country/region and the period concerned, it earns between 70-95% of the potential revenue that could be earned from the IBM Mainframe maintenance market.

⁶ Such as IBM's z800, z900, z890, z990, z9, z10, and zEnterprise mainframes. IBM currently sells the z10 (EC and BC) and zEnterprise (z196 and z114) mainframes.

⁷ See XXVth Report on Competition Policy, COM(96)126 final, paragraphs 86, 87 on the *Pelikan/Kiocera* decision and Commission Notice on the Definition of the Relevant Market for the Purposes of Community Competition Law (OJ C 372, 9.12.1997, paragraph 56). See also Case T-427/08 *CEAHR v Commission*, judgment of 15 December 2010, not yet reported, paragraphs 80, 96, 102 and 105.

If secondary products such as spare parts or operating system software updates for different brands are incompatible or not substitutable, and a moderate increase in the aftermarket prices does not affect customers' choices in the primary market (for instance because of high switching costs, "lock-in" effects or relative unimportance of prices in secondary markets), then there could be a separate market for the primary good and brand-specific aftermarkets.

According to the case-law, an aftermarket consisting of the secondary products (or services) of only one brand of a primary product, such as IBM Mainframes, would appear to be a relevant product market if: (a) switching to secondary products of other producers is not possible; and (b) there are high switching costs in the market for the primary product⁸. According to the Commission's Preliminary Assessment, these conditions were fulfilled in this case.

On the basis of the initial findings of the investigation, the Commission therefore concluded that relevant product aftermarkets might be identified for inputs needed in order to provide maintenance services to IBM Mainframes which cannot be sourced outside IBM and for hardware and operating system software maintenance services for IBM Mainframes.

The geographic scope of the relevant markets for inputs was defined as at least EEA-wide, as IBM's policy regarding the supply, pricing, and the distribution of inputs is implemented across the EEA.

Dominance

The Commission preliminarily concluded that IBM appeared to be dominant within the meaning of Article 102 TFEU in a market for certain inputs required for the maintenance of IBM mainframe hardware and operating system software, as IBM is the exclusive supplier of certain inputs which are required for maintenance services.

In particular, as the manufacturer of IBM mainframe hardware and operating systems, IBM is the only supplier of the following key inputs for hardware maintenance:

- (a) Only IBM can issue LICCC records which are needed to install certain LICCC-enabled parts⁹.
- (b) Only IBM can provide Machine Code Updates, which should be applied to an IBM mainframe to keep it in running order.¹⁰ IBM is the only reliable source of comprehensive, up-to-date information concerning the release and availability of these updates necessary for preventive maintenance.

Furthermore, IBM is the only supplier of key inputs for operating system software-related maintenance, such as program temporary fixes ("PTFs")¹¹. Only IBM can provide these PTFs.

⁸ See Case T-427/08 *CEAHR v Commission*, judgment of 15 December 2010, not yet reported, paragraphs 79-80, 84 and following.

⁹ LICCC-enabled spare parts are parts which can only be activated by a machine code, the LICCC record, which can only be provided by IBM. See Recitals (16) and (17) of the Decision.

¹⁰ These updates can be important in order to resolve known defects or safety issues so as to ensure preventive hardware maintenance.

¹¹ PTFs are code updates designed to resolve known software problems. IBM is the sole source of supply of these software updates for which it claims intellectual property protection.

In addition, the Decision affirms that these key IBM inputs are specific to IBM Mainframes and are not interchangeable with inputs for other computers¹². Entry into the market for the inputs required for the maintenance of IBM Mainframes would necessitate substantial investment and access to IBM's technology for which IBM claims intellectual property protection. Therefore, without IBM's agreement, no competitor is likely to become an alternative source of the inputs required for maintenance of IBM Mainframes.¹³

Practices raising concerns

The concerns identified by the Commission during its investigation related to IBM's dealings with TPMs providing maintenance services for IBM Mainframes. The Commission noted that IBM already had existing supply arrangements with competitors.

Firstly, IBM has restricted access to IBM spare parts for TPMs in comparison with IBM's treatment of its own customers and IBM's past treatment of TPMs. Before November 2002, access to IBM's spare parts was available to TPMs 24 hours a day and seven days a week. After November 2002, however, access for TPMs became restricted to normal business hours (Monday to Friday from 9:00 to 12:30 and from 13:30 to 17:30 excluding bank holidays).

Secondly, certain LICCC-enabled parts (i.e. new stand-alone Processor Books) could only be bought from IBM and could not be stocked by TPMs, since they were subject to an exchange-only policy. The defective spare part had to be returned to IBM within 48 hours of the spare part being delivered. Before October 2009, if TPMs failed to meet the deadline or failed to return the part altogether, a non-return, a much higher non-exchange price was applied to the part. After October 2009, a non-exchange price was charged for non-returns and a 3% daily fee applied for late returns. Depending on the series, model and configuration of the Mainframe, the non-exchange price could be up to 4139% higher than the exchange price.

Thirdly, IBM appeared to have unreasonably delayed access and withheld information on the existence of Machine Code Updates, thus putting TPMs at risk of being unable to provide their customers with adequate answers to technical issues. Indeed, timely access to this information is critical for TPMs.

Legal assessment

The Commission took the preliminary view that IBM imposed unreasonable supply conditions with regard to certain inputs required for the maintenance of IBM Mainframes on its competitors in the maintenance market, thus putting them at a competitive disadvantage¹⁴. In particular, the Decision preliminarily concluded that the cumulative effect of IBM's behaviour as described

¹² See Case 22/78 *Hugin Kassaregister v Commission* [1979] ECR 1869, paragraph 7.

¹³ The investigation also considered the extent to which IBM can act independently in the aftermarket without being affected by the competitive situation on the primary market. Different elements have been analysed, such as: (i) the ratio of installed based customers to new potential buyers on the primary market; (ii) the ability to price discriminate in favour of new purchasers of mainframes; (iii) the quality of information available to marginal customers.

¹⁴ In *Tetra Pak II*, the Court of Justice highlighted that the fact that a dominant company's abusive conduct has adverse effects on a market distinct from the dominated one does not detract from the applicability of Article 102 TFEU (see Case C-333/94 *P Tetra Pak v Commission* ("Tetra Pak II") [1996] ECR I-5951, paragraph 25).

above might amount to a constructive refusal to supply that could raise concerns under Article 102, paragraph b), TFEU¹⁵.

The Decision first recalls the *Commercial Solvent* line of case-law, according to which the refusal by an undertaking occupying a dominant position on the market of a given product to meet the orders of a previously supplied customer may constitute an abuse of that dominant position under Article 102 TFEU where, without any objective justification, that conduct is liable to eliminate a trading party as a competitor¹⁶.

The Decision then refers to the recent *TeliaSonera* judgment, in which the Court of Justice held that the conditions to be met under the *Bronner* case-law¹⁷ do not necessarily apply when assessing the nature of conduct which consists of supplying services or selling goods on conditions which are disadvantageous or on which there might be no purchaser¹⁸. However, with regard to the "indispensability" condition, the Commission's preliminary view was that, in any event, it would have been able to show that the inputs at issue are indispensable in order to provide maintenance services for IBM Mainframes¹⁹.

On the issue of whether IBM's conduct was able to eliminate a trading partner as a competitor, the Commission came to the preliminary conclusion that the cumulative effect of IBM's behaviour had the potential to lead to the exclusion of the few existing rival firms²⁰ that compete with IBM on the downstream market for IBM maintenance services²¹. The Commission's preliminary conclusion was, therefore, that IBM's behaviour might have limited markets to the prejudice of consumers pursuant to Article 102, paragraph (b), TFEU.

In response to the Preliminary Assessment, IBM argued that the practices at issue were objectively justified by legitimate commercial considerations, including intellectual property rights with regard to some inputs. However, in view of the commitments submitted by IBM (see below), the Commission did not need to further investigate the veracity of IBM's claims. Moreover, even assuming that IBM could show that its intellectual property rights cover the inputs at issue, in line with the *Volvo* case, the Commission considered that the exercise of an

¹⁵ Actual refusal of essential inputs by the dominant undertaking is not necessary for an abuse. Case T-301/04 *Clearstream* [2009] ECR II-3155, demonstrates that excessive delay in providing a good or service can amount to an abusive refusal to supply (see paragraph 151).

¹⁶ See Joined Cases C-468/06 to 478/06 *Sot. Lélos kai Sia EE and Others v GlaxoSmithKline AEVE Farmakeftikon Proïonton* [2008] ECR I-7139, paragraphs 34 and 49 (citing Joined Cases 6/73 and 7/73 *Istituto Chemioterapico Italiano and Commercial Solvents v Commission* [1974] ECR 223, paragraph 25, and Case 27/76 *United Brands and United Brands Continental v Commission* [1978] ECR 207, paragraph 183).

¹⁷ In *Bronner*, the Court of Justice listed the factors which should be present for a refusal to be considered an abuse: firstly, the refusal would have to be likely to eliminate all competition in the downstream market on the part of the person requesting access; secondly, the refusal must be incapable of objective justification; thirdly, the access must be indispensable to carrying on the other person's business inasmuch there is no actual or potential substitute for it (see Case C-7/97 *Bronner* [1998] ECR I-7791, paragraphs 41-46).

¹⁸ Case C-52/09 *TeliaSonera Sverige*, judgment of 17 February 2011, not yet reported, paragraph 55.

¹⁹ As explained above, a number of inputs required to provide maintenance service to IBM Mainframes (such as certain LICCC-enabled parts, Machine Code updates and operating system PTFs) cannot be sourced outside IBM and are subject to specific sourcing conditions. Since there can be no viable substitute for these essential inputs, they seem to be indispensable to compete effectively with IBM on the relevant downstream market for maintenance services for IBM mainframes. See Recitals (27), (28) and (38) of the Decision.

²⁰ See Joined Cases 6/73 and 7/73 *Istituto Chemioterapico Italiano and Commercial Solvents v Commission* [1974] ECR 223, paragraph 25.

²¹ See Case T-201/04 *Microsoft v Commission* [2007] ECR II-3601, paragraph 561.

exclusive intellectual property right may not justify the arbitrary refusal to supply spare parts to independent repairers²².

The Commitments

On 14 September 2011, in response to the Commission's concerns expressed in the Preliminary Assessment, IBM submitted commitments. IBM proposed that, for a period of five years, it would enter into a contract, based on commercially reasonable terms and conditions, with any TPMs interested in providing maintenance services in the EEA for any machine of the current line of IBM mainframes (the IBM System z Server²³), that have not been withdrawn from service. The contract would include an obligation on IBM to: (i) supply TPMs in an expeditious manner with LICCC-enabled parts, without any obligation on the TPM to return the defective part; and (ii) make Machine Code Updates available in an expeditious manner. The contract would also include the possibility for TPMs to enforce IBM's obligations in the event of any dispute relating to the agreement. In particular, the contract would provide for: (i) specific performance and contractual penalties in case of IBM's late delivery of LICCC-enabled parts (and/or the LICCC record updates required to install such parts)²⁴ or Machine Code Updates; and (ii) the possibility for TPMs to opt for court enforcement or enforcement through arbitration proceedings.

In an annex to the commitments, IBM also submitted a number of standard contract clauses detailing how these obligations could be implemented. Any modification or amendment of these standard clauses would require the Commission's prior authorisation. As regards the delivery of parts, the relevant standard contract clause provides that upon receipt of a valid order, and with credit authorization in place, subject to *force majeure*, LICCC-enabled parts will be delivered to TPMs at IBM's central spare parts stocking facility within two hours. Orders may be placed outside business hours with a credit authorization in place.

In order to facilitate dealings with TPMs, IBM also undertook to create the position of an EU-wide TPM Relationship Manager, who would act as a contact point for TPMs. In particular, the TPM Relationship Manager would be responsible for assisting TPMs in resolving any concerns regarding, *inter alia*, the availability of LICCC-enabled parts.

The Commission received observations from seven interested third parties within the market test period. The Commission informed IBM of these comments. Although the observations did not reveal any new competition concerns or raise any points such as to make the Commission reconsider the concerns it expressed in the Preliminary Assessment, IBM nevertheless submitted a slightly amended set of proposed commitments on 24 October and provided further explanations of its current business practices. These revised commitments were substantially in the form of the above mentioned commitments but provided some clarifications to address certain of the issues raised in the observations.

Conclusions

The Commission took the view that the commitments in their final form were sufficient and necessary to address the competition concern that IBM may have imposed unreasonable supply conditions on its competitors in the maintenance market, with regard to inputs essential to

²² Case 238/87 *AB Volvo v Erik Veng* [1988] ECR 6211, paragraph 9.

²³ See footnote 6 above.

²⁴ See footnote 9 above.

provide maintenance services to IBM Mainframes, in contravention of Article 102 TFEU. On 13 December 2011, the Commission made IBM's revised commitments binding by decision pursuant to Article 9.

IBM's compliance with the Decision should ensure the expeditious availability of inputs essential for IBM mainframe maintenance to TPMs, under commercially reasonable and non-discriminatory terms. TPMs should now be able to compete with IBM on the downstream market for maintenance services, since critical inputs necessary to provide maintenance service are now supplied to TPMs within the same time as to IBM maintenance customers.

The Decision confirms the main principles identified by the economic analysis and recent jurisprudence to define a separate secondary market. The speed with which the Decision was adopted (less than 18 months from the opening of proceedings) also shows how effective the provisions of Article 9 can be in allowing the Commission to bring practices raising potential competition concerns quickly to an end. Indeed, this instrument proves particularly useful in dynamic industries such as Information Technology.