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Interoperability as an “essential facility” in the Microsoft case—encouraging competition or stifling innovation?

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Introduction

The EU Microsoft litigation, culminated with the CFI judgment of 17 September 2007,¹ represents a high profile victory for the European Commission’s approach to exclusionary conduct of dominant companies.² However, the decision raises several questions on the application of Article 82 EC Treaty to refusals to grant access to inputs covered by intellectual property (IP) rights.

This article will analyse the approach adopted by the Commission and the CFI to Microsoft’s refusal to disclose interoperability information and assess its implications for the development of the principles governing exclusionary abuses. Thereafter, it will illustrate the Commission 2008 Guidance on the Commission’s enforcement priorities in applying Article 82 of the EC Treaty to abusive exclusionary conduct by dominant undertakings (hereinafter referred to as the 2008 Guidance)³ and consider it in the light of the principles resulting from the existing case law.⁴

It will be contended that the 2007 Microsoft judgment and the 2008 Guidance reflect the tension between, on the one hand, the need to encourage investment in research and development and, on the other hand, the achievement of effective competition, a tension which is particularly apparent in highly technological industries where rivalry is led by the pressure to innovate and de facto industrial leaders are destined to emerge.

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¹ Case T-201/04, Microsoft v Commission, [2007] ECR II-3601 (hereinafter referred to as the 2007 Microsoft judgment).
The article will argue that the approach adopted by the CFI and the Commission in addressing this potential conflict, despite being consistent with a view of innovation as a “cooperative process” to which all undertakings should take part along with the leading supplier, may not be entirely appropriate to the need to reward and protect the value of investments in innovation driven markets.

In conclusion, the article will contend that Microsoft, despite its exceptional circumstances, has had an undeniable impact on the future enforcement priorities identified by the Commission, with potentially adverse and yet to be foreseen consequences for the incentives to invest in innovation driven industries. Therefore, it will be suggested that due to the importance of encouraging future technical development through the promise of the rewards arising from transient market leadership, it might be desirable to “backtrack” from an essentially interventionist stance in the application of Article 82 EC Treaty to refusals to deal to the more restrained position emerging from the ECJ IMS Health and Bronner judgments.

**Refusals to deal in the Microsoft case**

*Refusals to deal as abusive behaviour: the early cases*

Given the limited scope of this article, it is not possible to analyse in detail the case law governing the refusal by a dominant undertaking to deal with other firms, including its rivals. However, it is necessary to recall briefly the relevant rules developed by the ECJ. The Court has long recognised that, in principle, every undertaking, even one enjoying significant market power, is free to choose its business partners and therefore to refuse to deal with a specific firm. At the same time, other decisions have acknowledged that there may be “exceptional circumstances” in which interrupting an existing commercial relationship, refusing to start *ex novo* supplies to another undertaking, denying access to an input or an infrastructure as well as denying the grant of an intellectual property licence may constitute an abuse of a dominant position.

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In *Commercial Solvents* the ECJ held that the refusal by a dominant undertaking to continue supplying one of its long standing customers, active on a downstream market, with an input which was “essential” for the latter to keep producing a derivative product constituted an infringement of Article 82 EC Treaty. The Court took the view that, despite being motivated by a plan to vertically integrate the two business activities, the refusal would have resulted in Commercial Solvents’ nearest competitor being excluded from the downstream market for the finite drug and allowed it to extend its monopoly power to it, to the detriment of the overall integrity of the competitive process.

The Commission and the ECJ extended the principles laid down in this judgment to a number of situations characterised by the existence of a “vertical” relationship between the dominant undertaking and its competitors as a result of which the former controlled access to infrastructures, inputs or other “facilities” deemed to be “indispensable” for the performance of business activities in downstream markets because they could not be physically or financially duplicated. However, they were also mindful of the circumstance that imposing the forced disclosure or the compulsory access on a dominant undertaking not only struck at the heart of one of the main tenets of the market economy, i.e. freedom of contract, but could also jeopardise the incentive to future investment.

Consequently, the ECJ initially adopted a seemingly narrow reading of Article 82 to refusals to grant IP licenses. The Court stated in *VOLVO* that imposing an obligation to licence IP rights would have deprived their proprietor of its very essence and held that the refusal to grant a license would be prohibited by Article 82 of the Treaty only if it involved other abusive practices, such as the charging of unreasonably high prices or the “arbitrary refusal to supply spare parts”, especially those required to service cars which were still in circulation.

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8 *Id.*, para. 23.
9 *Id.*, para. 24. See also, *mutatis mutandis*, 2008 Communication, supra, (fn.2), pra. 22 and 74.
14 *Id.*, para. 8.
15 *Id.*, para. 9.
However, in the later *Magill* case\(^{16}\) the ECJ was willing to extend the *Commercial Solvents* principles to the refusal to grant a copyright licence allowing the licensee to compete on the downstream market (the market for the supply of TV guides) in which the input covered by IP rights (in that case TV listings) was “indispensable”.\(^{17}\) It was held that although the ownership of an intellectual property right did not confer on an undertaking a dominant position in and of itself, there could be “exceptional circumstances” in which the refusal to grant a licence for the use of the element covered by that right would infringe Article 82 EC Treaty.\(^{18}\) This would occur if the refusal prevented the undertaking seeking the licence from supplying a new product for which there was a potential consumer demand and thus allowed the dominant undertaking to reserve to itself a *de facto* monopoly on the downstream market and was not objectively justified.\(^{19}\)

In *Bronner*, a judgment relating to the refusal to grant access to tangible inputs, the ECJ clarified the meaning of “indispensability” for the purposes of Article 82. It held that the firm seeking access would have to prove that there are no “alternative solutions, even if they are less advantageous” due to “technical, legal or economic obstacles capable of making it impossible or at least unreasonably difficult” for competing suppliers “to create, possibly in cooperation with other operators, the alternative products or services”.\(^{20}\)

In the later *IMS Health*\(^{21}\) preliminary ruling, the ECJ confirmed that the “new product” requirement laid down in *Magill* sought to strike a balance between the interests of effective competition, especially on related or neighbouring markets, and the need to foster, at least to some degree technical innovation.\(^{22}\) Consequently, it held that in cases concerning refusals to grant an IP licence the freedom of the owner of an intellectual property right would only be restricted to the extent that was strictly necessary to allow competitors active downstream to supply novel products.\(^{23}\)

As a result, this type of conduct would infringe Article 82 if four conditions were satisfied and unless the dominant firm could prove that its behaviour was “objectively justified”: first, it must be possible to identify two distinct levels of supply, even if only potential, one for the “essential” input, the other for the provision of products or


\(^{17}\) Id., para. 55; see also para. 73.

\(^{18}\) Id., para. 50.

\(^{19}\) Id., para. 51-52, 54, 73.

\(^{20}\) Id., para. 28.


services for which the latter is necessary; second, the refusal must concern an “indispensable input”; third, the refusal must prevent the emergence of a new product for which potential consumer demand exists and, finally, must be such as to exclude competition from the downstream market.\textsuperscript{24}

The \textit{IMS Health} test, however, left open a number of questions: having regard to the notion of “new product”, the judgment was silent on whether “follow on innovation”, namely the supply of goods or services constituting only an “upgraded” version of existing ones, could fulfil that requirement. On this point, AG Tizzano stated in his Opinion that the “balance between the interest in protection of the intellectual property right and the economic freedom of its owner, on the one hand, and the interest in protection of free competition, on the other” should be struck in favour of ensuring genuine competition “only if the refusal (…) [prevented] the development of a secondary market to the detriment of consumers”,\textsuperscript{25} by preventing competing suppliers from producing “goods or services of a different nature which, although in competition with those of the owner of the right, answer specific consumer requirements not satisfied” by products already available.\textsuperscript{26} Thus, it could be argued that, for a refusal to grant an IP licence to be abusive, the party requesting it would have to demonstrate that it is planning to supply not just an “upgraded” version of an existing product, but output displaying a significant degree of novelty \textit{vis-à-vis} goods or services already available on the market.\textsuperscript{27}

Another unresolved question was whether a dominant undertaking could argue that the refusal to license, especially aimed to a competitor, was necessary to allow it to recoup the value of its investment and, therefore, could be “objectively justified”.\textsuperscript{28} The Commission recognised in its 2005 Discussion Paper on the application of Article 82 to exclusionary abuses (hereinafter referred to as 2005 Discussion Paper)\textsuperscript{29} that any input protected by an intellectual property right, even an “indispensable” one, was often the outcome of significant investments involving risk

and that “to maintain incentives to innovate, the dominant firm should not be unduly restricted” in its ability to enjoy the benefits of its innovation efforts.\(^{30}\)

Accordingly, it stated that a dominant undertaking could “reward its investment by seeking appropriate compensation for it as well as by restricting the availability and/or the access” to the outcome of its innovation efforts,\(^{31}\) but only for the time necessary “to ensure an adequate return” on the investment.\(^{32}\) The Commission would also consider “the respective values that are at stake” and especially, on the one hand, any “possible positive effects on incentives to follow-on investment from allowing access”\(^{33}\) and, on the other hand, the need to allow consumers to “benefit from innovation brought about by the dominant undertaking’s competitors.”\(^{34}\)

In the light of the above, it could be argued that the Commission was mindful of the “tension” existing between the competing goals of effective competition and of unfettered incentive to innovation arising from ordering the forced access to inputs covered by intellectual property rights. However, the 2005 Discussion Paper suggested that any objective justification arguments based on the need to protect the dominant undertaking’s incentive to innovate would probably be unsuccessful, especially when the refusal to grant a licence was likely to result in stifling further technical development, whether “radical” or “follow on”.\(^{35}\)

Consequently, it is concluded that although the freedom to choose business partners is recognised even to undertakings enjoying significant market power, there may be cases in which their refusal to deal with other firms could constitute abusive behaviour caught by Article 82 of the EC Treaty. Nevertheless, the possibility of imposing an obligation to share the outcome of expensive and risky investment and especially granting intellectual property licences should be carefully assessed in order to avoid stifling future innovation. It could be argued that whereas the ECJ in *IMS Health* emphasised the need to strike a balance between the interest of genuine competition and the need to reward adequately and encourage innovation, the Commission preferred to adopt an approach favouring “follow-on” innovation, which may not, however, be entirely capable of preserving the drive to technical development in highly technological industries.

\(^{32}\) *Ibid.*
\(^{33}\) *Id.*, para. 236.
\(^{34}\) *Id.*, para. 240.
The next sections will examine the position of the Commission and the CFI as regards the refusal to grant IP licences in the software industry with a view to assessing whether the outcome of the Microsoft case represented a suitable response to the need to reconcile the competing interests of promoting competition as well as fostering technical advancement.

The 2004 Commission decision in ‘Microsoft’

As is well known, in 2004 the Commission found that Microsoft’s refusal to continue to disclose interoperability information relating to its personal computer operating system (hereinafter referred to as PC OS) to independent suppliers active on the separate market for work-group server OS constituted an infringement of Article 82 EC Treaty. It was held that, given Microsoft’s dominance on both the PC operating systems and the work group server OS market and the “strong commercial and technical associative links” between the two markets, its conduct prevented independent software providers from developing software that could “seamlessly integrate” with Microsoft-run servers.

Due to its unrivalled economic power on the market for the supply of PC operating system, Microsoft had in fact been able to “determine (…) independently from its competitors the set of coherent communication rules that will govern the de facto standard for interoperability in work group networks”. Its refusal to continue providing its competitors with the information necessary to achieve and maintain interoperability therefore created a risk of both stifling competition on that market and hampering innovation by “locking” existing and future users in its domain architecture and eventually excluding viable competitors on the work group server OS market. In the Commission’s view, these adverse effects on technical development could not be counterbalanced by the need to safeguard Microsoft’s own incentives to innovate.

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37 Id., para. 573-75; see also para. 578-583.
38 Id., para. 541.
40 Id., para. 779.
41 Id., para. 781.
42 Id., para. 782.
43 Id., para. 782.
44 Id., para. 782.
45 Id., para. 779.
46 Id., para. 779-781.
Consequently, the Commission, concerned with avoiding that its interruption of the disclosure of interoperability information could threaten “follow on” innovation and thus hamper any remaining competition on an adjacent market, took the view that, due to its overwhelming market power on the “primary” market for OC OS software, Microsoft’s conduct constituted an abuse of its dominant position. In fact, discontinuing access to the protocols would have disrupted innovation and eventually eliminated competition in a key market for the future development of the software industry.

Glader argued that Microsoft’s conduct was clearly motivated by a decision to “branch out” on the related market for the supply of work group server OS. Nonetheless, that strategy, even though it was economically rational, would have allowed it to “shape technological development” and thereby reinforce its leadership not only on the PC OS market, on which Microsoft was already incontestably dominant, but also on the related market for the supply of server OS, which, instead, remained relatively competitive.

The 2004 Microsoft decision was widely debated and the limited purvey of this article does not allow to comment any further on its findings. However, it is clear that this case put to the test the current principles governing refusals to deal under Article 82 EC Treaty in respect to the software market and more generally that for highly technological products. The next section will consider the CFI appeal judgment and analyse the extent to which it represented an appropriate response to the competition dynamics of the market.

The 2007 appeal judgment in ‘Microsoft’

Section 2.2 briefly illustrated the 2004 Commission decision finding that, by discontinuing the disclosure of interoperability information to its competitors on the work group server OS market, Microsoft had abused its dominant position. Although any more in-depth analysis is beyond the scope of this work, it is necessary at this point to consider:

48 See Microsoft decision, para. 779-781.
49 Glader, cit. above (footnote 28), p. 287.
50 Id., p. 288.
51 Ibid. See 2004 Microsoft decision, para. 783.
junction to examine briefly some of the economic features of highly innovative industries, including that for the production of software.

As was pointed out by the Commission itself in its decision, computer software is designed to interact with other products and should therefore be able to interconnect and function “seamlessly” with other software as well as with hardware,\(^{53}\) to allow individual users to enjoy a reciprocal dialogue between machines both as part of and between networks.\(^{54}\) Consequently, it was suggested that “the utility that a user derives from the consumption” of a particular programme is destined to increase with the number of its users\(^ {55}\) and that, as a result of its “wide acceptance”, a particular programme is likely to become “entrenched” as the “format of choice” for end users in a particular market and, thus, as the industry standard in a specific period of time.\(^ {56}\) Consequently, its owner would be likely to dominate the market until a better, more efficient format displaced the hitherto “entrenched” champion.\(^ {57}\)

The peculiar features of the software market, i.e. its “network effects”, were taken into account by the 4\(^{th}\) Circuit of the US Court of Appeals in its order in the Re: Microsoft Antitrust Litigation,\(^ {58}\) concerning the tied sale of Windows together with Microsoft’s own internet browser. The order explained that the “positive feedback effect” arising from the adoption of particular software, namely the circumstance that its “attractiveness (…) to consumers [increased] with the number of persons using it”, had allowed it to emerge as the leading industry standard.\(^ {59}\) It pointed out that customers on the PC OS market, on the one hand, would adopt more and more frequently the “entrenched format” as their PC interface and complementary software and hardware designers, on the other hand, would construct applications and content compatible with that \textit{de facto} standard to reach the widest possible “audience”.\(^ {60}\) However, due to the importance of compatibility as a decisive factor influencing customers’ choice, the trends characterising the development of this market would inevitably result in excluding any competing format from the market and in allowing the supplier of the “industry standard” to become the “winner takes all” firm.

\(^{53}\) See, e.g., 2004 Microsoft decision, para. 732 ff.
\(^{55}\) Ibid.
\(^{56}\) Ibid.
\(^{57}\) Ibid. For commentary, see, \textit{inter alia}, Montagnani, “Remedies to exclusionary innovation in the high-tech sector: is there a lesson from the Microsoft saga?”, (2007) 30(4) \textit{W. Comp.} 623 at 625.
\(^{58}\) \textit{In re: Microsoft Corporation Antitrust Litigation—Sun Microsystems Inc v Microsoft}, 333 F. 3\(^{rd}\) 517.
\(^{59}\) Per curiam, p. 521, fn.1.
\(^{60}\) Ibid.
It is against this economic background that the CFI judgment in Microsoft should be analysed. The appeal judgment started with an assessment of the degree of interoperability required by the Commission in its 2004 decision. It was held that, given the indissociable links existing between client-server and server-server interoperability within Windows’ domain architecture, competing suppliers should be granted access to both sets of protocols to be able to offer compatible software to Microsoft’s own OS and thus compete effectively on the work-group server OS market. The CFI, therefore, rejected Microsoft’s allegations that the Commission had adopted too wide a view of the concept of interoperability and that this notion should be limited only to protocols allowing for “client/server” interconnection. It took the different view that competing suppliers should be able to manufacture work group server OS able to function within wider networks operated by Windows’ own OS.

Thereafter, the Court assessed whether the Commission had correctly applied the principles governing refusals by dominant undertakings to grant IP licences. It reiterated that, although in principle even undertakings enjoying significant market power were entitled to select freely its business partners, there may be “exceptional circumstances” when their refusal to deal constituted an abuse under Article 82.

The CFI held that denying an IP licence without any objective justification would infringe the antitrust rules if the input at issue was “indispensable” for the performance of a given business activity, the refusal prevented the appearance of a “new product that was not currently supplied” and for which potential consumer demand existed. However, the Court rejected Microsoft’s allegations that the case law provided an exhaustive list of requirements. Instead, it agreed with the Commission that the IMS Health preliminary ruling should be read as establishing only an “open ended set of conditions”, i.e. a number of factors that would be “relevant” but whose existence and significance had to be assessed against the background of each case.

61 Id., para. 230-231.
63 2007 Microsoft judgment, para. 319. See e.g. case 238/87, VOLVO v Veng, [1988] ECR 6211, para. 8-9.
64 2007 Microsoft judgment, para. 324.
66 Id., para. 332. For commentary, see Anderman, “Does the Microsoft case offer a new paradigm for the ‘Exceptional Circumstances’ test and compulsory copyright licenses under EC Competition law?”, (2004) 2(1) CompLRev 7 at 15.
Having regard to the “indispensability” condition, the CFI noted that the information sought by Microsoft’s competitors constituted an element “of significant competitive importance” without which other suppliers could not operate viably on a related market, due to Microsoft’s overwhelming dominance on the PC OS market.\(^{67}\)

The Court pointed out that, given the nature of software as a product that cannot function in isolation but is destined to interact with other products,\(^{68}\) ensuring interoperability between PCs linked up in networks as well as between networks was essential for competing suppliers to remain profitable on that market.\(^{69}\) Consequently, it was concluded that the interoperability protocols constituted an indispensable input for the purpose of Article 82 of the Treaty.

The CFI, then, considered whether the refusal to disclose the required interoperability protocols had prevented the emergence of a “new product” for which potential demand existed on the work group server software market.\(^{70}\) It rejected the applicant’s assertion that this condition would be met only when the allegedly abusive conduct had prevented the supply of products or services not currently offered by the owner of the “indispensable” input.\(^{71}\) The Court, therefore, accepted the Commission’s literal reading of Article 82 (b) of the Treaty, according to which any form of conduct “limiting production, markets or technical development to the prejudice of consumers” would be abusive\(^ {72}\) and took the view that to hold otherwise would, in substance, amount to enabling a dominant undertaking on the market for the supply of the “primary” product to prevent the development of a secondary market for the supply of “auxiliary” goods.\(^{73}\)

The CFI also found that allowing Microsoft to refuse to licence its interconnection protocols would be detrimental to consumer welfare since, as a result of the applicant’s conduct, the preferences of customers had been “channelled” toward the entrenched format, although non-Microsoft OS had been regarded as “better alternatives” to the dominant software.\(^{74}\) Therefore, the Court concluded that the interruption of the disclosure of interoperability information had infringed Article 82 since it had prevented Microsoft’s rivals from supplying sufficiently compatible work group server software that could compete with the applicant’s own software.

\(^{67}\) 2007 Microsoft judgment, para. 381; see, e.g., case C-7/97, BronnerGmbH & Co v Mediaprint, [1998] ECR I-7791, para. 47.

\(^{68}\) 2007 Microsoft judgment, para. 383.

\(^{69}\) Id., para. 387.

\(^{70}\) Id., para. 334.

\(^{71}\) Id., para. 626.

\(^{72}\) Id., para. 651. See e.g. Larouche, “The European Microsoft case at the crossroads of competition policy and innovation”, cit. (footnote 62), p. 10-11.

\(^{73}\) 2007 Microsoft judgment, para. 647.

\(^{74}\) Id., para. 652.
Thereafter, the Court addressed the question whether the refusal was such as to exclude all competition from a secondary market. 75 It rejected the argument that this condition should have been interpreted as meaning that there was a “high probability” that competition would be eliminated from the relevant market 76 and held that the spirit of the Treaty and the function of Article 82 required the Commission to tackle Microsoft’s behaviour before all competition had been eliminated from the market. 77

The CFI reviewed the Commission’s analysis of the trends of the market shares held by Microsoft and by its competitors and took the view that the refusal to supply interoperability information had de facto marginalised a number of competing suppliers from the market to the point that they no longer constituted a “credible threat” to the dominant firm. 78 In the Court’s view, the impact of the practice was also very likely to become irreversible due to the market’s network effects: 79 it was held that the entrenchment of Microsoft’s own work group server OS, resulting from the denial of access to the interconnection protocols, had, firstly, prevented customers from switching to competing OS 80 and, secondly, had encouraged developers of auxiliary software and contents as well as technicians to develop the necessary expertise and complementary services that would be compatible with the leading format, to the detriment of suppliers of alternative software. 81 As a result, the applicant, who had already imposed its own product as the industry standard on the market for the supply of PC OS, 82 had been able to extend its market power to the related market for the provision of work group server OS and thereby ensure that its domain architecture would become the leading format therein. 83

Finally, in respect to the requirement of absence of objective justification, the CFI held that the sole fact that the protocols were covered by copyright could not be relied on to avoid a finding of infringement, since it would be tantamount to rendering inapplicable the exception established by the ECJ. 84 It emphasised that the

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75 Id., para. 437 ff.
76 Id., para. 438-439.
77 Id., para. 561-562.
78 Id., para. 593-594. For commentary, see Larouche, “The European Microsoft case at the crossroads of competition policy and innovation”, cit. (footnote 62), p. 10.
79 Ibid.; see also para. 619.
80 Case T-201/04, Microsoft v Commission, supra (fn. 1), para. 619
81 Ibid.
82 Id., para. 389-390; see also para 592-593. For commentary, see Ong, “Building brick barricades and other barriers to entry: abusing a dominant position by refusing to licence intellectual property rights”, (2005) 26(4) ECLR 215 at 222 and 224.
83 2007 Microsoft judgment, para. 422.
84 Id., para. 690-691.
The disclosure of interoperability information was a “common practice" in the industry and that the applicant had not provided sufficient evidence that revealing its interconnection protocols would have hampered its incentive to innovate its products.

Nor could Microsoft’s refusal be justified by the need to avoid that its OS could be duplicated. The CFI stated that the obligation did not extend to the specifications defining the “internal logic" of Windows and that in any event the competing suppliers lacked any “commercial incentive" to reproduce Microsoft’s software because, if they wished to “survive" on the market for the supply of work group server OS, they would have had to “differentiate” their products from the dominant format.

The analysis conducted so far has illustrated that the Microsoft case confronted the Commission and the CFI with two apparently conflicting interests, namely the need, on the one hand, to reward and support investment in innovation and, on the other hand, to maintain genuine competition even on markets, such as that for the supply of software, is characterised by network effects and by a trend toward the emergence of an “industry leader”.

More generally, Microsoft could be interpreted as reflecting a “clash" between two opposing views of competition and innovation: one is based on investment in research and development and on the idea of “competition for the market", by means of the emergence and the temporary entrenchment of a “superior product”. The other, envisages competition and innovation as the outcome of a process in which competing suppliers, even those less efficient than the “winner”, should be allowed to participate and, therefore, accepts that the leading supplier should allow its competitors to share the benefits of the investment required to produce the “industry standard” by means of forced access to the output of that innovation.

However, it could be argued that embracing this idea of competition “on the market” may have chilling effects on further investment in the development of new technologies and, especially in innovative industries, where competition is driven by investments in research and development, and freeze the drive to compete ultimately for the best product to emerge as the leading standard.

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85 Id., para. 702.
86 Id., para. 710.
87 Id., para. 657-658.
89 Id., para. 658; see also para. para. 577, 580, 587, 591, 711.
90 Glader, cit. above (footnote 28), p. 56-57.
91 Id., p. 83-84.
92 Id., p. 44-45.
Consequently, the central question appears to be how to reward the efforts of technological development of the “winning” supplier while avoiding the possibility of a “winning product” becoming so entrenched as to prevent the emergence of a more efficient, and thus preferable, alternative output. This will be addressed in the next section.

Refusals to license and Article 82: what are the implications of ‘Microsoft’?

The previous sections considered the Microsoft judgment and highlighted how the CFI decision struck at the heart of the debate concerning the nature and the goals of the competitive process, especially in highly technological markets. The first controversial point arising from the case concerned the notion of “interoperability” prevailing in the CFI decision: it is reminded that, according to the Court, this concept should extend to client/client as well as to client/server interoperability, to enable servers and PCs operated by competing OS to act as “domain controllers” as well as “clients” within the Microsoft domain architecture.

However, this view may be contrasted with the 1984 IBM Undertaking, according to which the obligation imposed on a dominant undertaking to license interface information was limited to those specifications allowing competing suppliers to manufacture compatible hardware and software compatible with IBM standards. Although the obligation imposed on Microsoft stopped short of permitting competing suppliers to access the “source code” of the dominant OS and may not therefore allow for its complete “cloning”, whether its scope is compatible with the need to preserve the drive to innovation on the market remains open to question.

As was briefly explained above, due to the “network effects” inherent in the nature of software as a good designed to interact with other products, a trend is very likely to emerge in favour of a “popular” format amongst end users and installers, technicians and suppliers of content and complementary software, which will eventually dominate the market, albeit temporarily. Consequently, it could be

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93 Id., p. 42-43.
94 2007 Microsoft judgment, para. 237.
95 IBM (System 370), see (1984) EC Competition Policy Newsletter, parts 94-95.
99 Ibid.
argued that, in innovation driven industries where the most successful innovator becomes the market leader for some time, competition tends to occur at the early stage of the development of competing products and brings with it, on the one hand, high sunk costs and, on the other hand, the perspective of high returns through the (transient) entrenchment of their products, linked to the associated network effects.

These dynamics can deliver a number of advantages to consumers, such as fostering fast paced innovation and leading to the supply of products that have better technical qualities and thus are more suitable to the needs of its users. The positive aspects of the network externalities associated with the widespread presence of the existing leading standard are also likely to benefit end users by enabling them to connect with a large customer-based and obtain support from providers of media contents and support services.

In the light of the above, it is contended that antitrust enforcement should seek to enhance the process of innovation driven competition and the resulting introduction of new products and thereby maintaining pressure on the leader as well as on its rivals to continue investing in it. Consequently, its focus should not be on forcing the disclosure of compatibility information after a de facto leader has already emerged, but on the provision of effective systems for technology trading which would avoid the foreclosure of the market and strengthen the incentive to innovate, especially on the part of the leading firm.

Against this background, it is argued that the 2004 Microsoft decision was concerned with reducing the risk that, once the de facto standard had become established, the positive feedback loop associated with its widespread adoption would have led to the stifling of competition “on the market”, rather than with boosting the drive to invest in research and development by both Microsoft and its rivals.

On this point, it is suggested that the solution adopted in Microsoft could be justified by the need to avoid that the applicant could both further entrench its leadership on the market for PC OS and extend its market power on to the market for the supply of work group server OS. Ong argued that the applicant had de facto succeeded in rendering the OS users de facto dependent on Windows by recourse to

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101 Ibid.
102 Ibid.
105 Id., p. 42; see also p. 44-45.
106 Id., p. 47.
choices of design and promotion as well as by relying on the legal protection afforded to it by its intellectual property rights on the interoperability protocols and interface specifications.\textsuperscript{108}

It is submitted that just as in \textit{Commercial Solvents},\textsuperscript{109} Microsoft’s interruption of the supply of information necessary to guarantee interoperability with the “entrenched” software had in fact prevented alternative suppliers from developing OS that could “interconnect” with Windows-operated machines and networks, to the prejudice of technical development and consumer welfare.\textsuperscript{110} It would thus appear that the demands of “genuine competition” on that downstream market justified both the wide interpretation of the concept of interoperability and the finding of indispensability of the protocols.\textsuperscript{111}

However, it could be argued that these conclusions may not be easy to reconcile with the need to foster the incentive to innovate, even on the part of dominant undertakings and on their competitors.\textsuperscript{112} Although it is acknowledged that the exclusivity of intellectual property rights creates a tension with some aspects of the genuine competition process,\textsuperscript{113} it is nonetheless necessary to “strike a balance” between preserving competition especially in respect to the supply of similar auxiliary goods or services and safeguarding innovation through the promise of appropriate financial rewards for it, thereby enhancing competition “for the market”.\textsuperscript{114}

It is suggested that the \textit{Microsoft} judgment has tipped the scales in favour of Microsoft’s rivals and thus of competition “on the market”. It could be questioned whether the notion of “full interoperability”, despite having short term benefits for the ability of alternative suppliers of work group server OS to continue manufacturing compatible products due to the availability of the interconnection protocols,\textsuperscript{115} can also lead to appreciable medium and long term advantages for innovation. It is submitted that the imposition of such a broad obligation may encourage the

\begin{footnotesize}
\begin{itemize}
\item \textsuperscript{108} Id., p. 222.
\item \textsuperscript{110} See 2004 \textit{Microsoft} decision, para. 711-712. For commentary see Ong, “Building brick barricades and other barriers to entry: abusing a dominant position by refusing to licence intellectual property rights”, (2005) 26(4) ECLR 215, p. 221, 223.
\item \textsuperscript{111} \textit{Ibid}. See also para. 619.
\item \textsuperscript{113} Id., p. 44-45. See also Ong, “Building brick barricades and other barriers to entry: abusing a dominant position by refusing to licence intellectual property rights”, (2005) 26(4) ECLR 215 at 221-222.
\item \textsuperscript{114} Montagnani, “Remedies to exclusionary innovation in the high-tech sector: s there a lesson from the Microsoft saga?”, (2007) 30(4) \textit{W. Comp.} 623, p. 630-631.
\end{itemize}
\end{footnotesize}
“emulation” of a de facto standard rather than the investment in new technologies which would eventually “displace” the leading software.\footnote{Ibid.}116

The apparently “benevolent” attitude of the CFI for competitors seems to emerge also from its interpretation of the notion of “indispensability”.\footnote{Case T-201/04, Microsoft v Commission, supra (fn. 1), para. 434-435. Cf. Pardolesi and Renda, “The European Commission’s case against Microsoft: Kill Bill?”, (2004) 27(4) W. Comp. 513 at pp. 537-541.}117 In Microsoft, the CFI took the view that the “indispensability” of the interoperability information would depend on whether it constituted an element of such a “significant competitive importance” for Microsoft’s competitors on the market for work group server OS\footnote{2007 Microsoft judgment, para. 381.}118 that, without it, alternative suppliers could not remain “viable” and “attractive” substitutes to Microsoft’s software.\footnote{Id., para. 389-390; see also 2004 Microsoft decision, para. 872.}119

The Court also emphasised the characteristics of the product as well as the extraordinary circumstances of the case and especially the overwhelming dominance enjoyed by the applicant.\footnote{Id., para. 381-382, 387.}120 Accordingly, it took the view that access to the interface specifications necessary to allow machines operated by alternative OS to “participate in the Windows’ domain architecture (...) on an equal footing” as machines operated by Windows itself would be the only way in which competing suppliers could remain “viable” and “attractive” alternatives to Microsoft in the eyes of end users. By contrast, the ECJ had defined this condition as the absence of any “actual or potential substitute” for the input controlled by the dominant undertaking\footnote{Case C-7/97, Bronner GmbH v Mediaprint, [1998] ECR I-7791, para. 38.}121 so that, in the words of AG Jacobs, its “duplication (...) [would be] impossible or extremely difficult owing to physical, geographical or legal constraints or is highly undesirable for reasons of public policy”\footnote{Id., per AG Jacobs, para. 65.}122 or the costs associated with it could “deter any prudent undertaking from entering the market”.\footnote{Id., per AG Jacobs, para. 66.}123

In the light of the principles laid down by the ECJ, it is argued that the CFI refrained from considering whether other ways to ensure interoperability, such as the availability of interconnection protocols already in the public domain, “reverse engineering” or the existence of “open source” software, could achieve the same objective without having to force Microsoft to disclose its information.\footnote{2007 Microsoft judgment, para. 331; see also para. 434-435. Cf. 2004 Microsoft decision, para. 669, 684-685; for commentary, see, inter alia, Pardolesi and Renda, “The European Commission’s case against Microsoft: Kill Bill?”, (2004) 27(4) W. Comp. 513 at pp. 537-541.}124

\footnote{116 Ibid.}116 \footnote{117 Case T-201/04, Microsoft v Commission, supra (fn. 1), para. 434-435. Cf. Pardolesi and Renda, “The European Commission’s case against Microsoft: Kill Bill?”, (2004) 27(4) W. Comp. 513 at pp. 537-541.}118 \footnote{2007 Microsoft judgment, para. 381.}119 \footnote{Id., para. 389-390; see also 2004 Microsoft decision, para. 872.}120 \footnote{Id., para. 381-382, 387.}121 \footnote{Case C-7/97, Bronner GmbH v Mediaprint, [1998] ECR I-7791, para. 38.}122 \footnote{Id., per AG Jacobs, para. 65.}123 \footnote{Id., per AG Jacobs, para. 66.}124
and the positive feedback effects characterising the industry constituted key factors in the CFI’s findings.  

Although these concerns cannot be dismissed outright, it may be contended that the breadth of the obligation imposed on Microsoft and its potential implications for the incentives to innovate could have justified a closer look at the available alternatives and greater adherence to the Bronner concept of “indispensability”.

Another thorny issue concerns the interpretation of the “new product” requirement. According to the IMS Health preliminary ruling, the function of this requirement is to strike a balance between the protection of IP rights and especially the freedom of their holder to choose whether and to whom to grant a licence and the need to safeguard and encourage genuine competition. The ECJ indicated that the interests of competition would only prevail if it could be shown that the refusal to grant a licence precluded the development of a secondary market by not allowing competitors to supply “new goods or services not offered by the owner of the right and for which there is potential consumer demand” to the detriment of consumer welfare.

By contrast, it was held in the 2007 Microsoft judgment that this requirement should be read as encompassing not only “a limitation (…) of production or markets, but also of technical development”. The CFI took the view that the emergence of a “new” product could not “be the only parameter” in the assessment of the nature of Microsoft’s conduct but that consumer welfare could be equally prejudiced if, due to the interruption of the disclosure of the interoperability information, competitor swere unable to supply workgroup server OS that could “be distinguished from [Windows systems] with respect to parameters which consumers consider important.”

Microsoft’s refusal to grant a licence to competing suppliers therefore infringed Article 82 EC Treaty since it prevented the appearance of work group server OS that would be compatible with Microsoft’s own architecture to a degree sufficient to


126 See e.g. case note to case T-201/04, Microsoft v Commission, judgment of 17 September 2007, (2008) 64 (4) CMLRev 863 at 881-882.


128 Id., para. 49. See also Opinion of AG Tizzano, para. 62.


130 Case T-201/04, Microsoft v Commission, supra (fn. 1), para. 647.

131 2007 Microsoft judgment, para. 656.

132 Ibid.
provide a “realistic” alternative to Microsoft’s own software for individual users, who would “otherwise be ‘locked in’ a homogenous Windows solution,” despite not being a “breakthrough product.”

The CFI took the view that the emergence of a “new” product could not “be the only parameter” in the assessment of the nature of Microsoft’s conduct but that consumer welfare could be equally prejudiced if, due to the interruption of the disclosure of the interoperability information, competitors were unable to supply workgroup server OS that could “be distinguished from [Windows systems] with respect to parameters which consumers consider important.”

It would appear that, as was argued above, the Court was concerned with countervailing the effects of the “positive feedback loop” arising from the entrenchment of Windows. Nonetheless, it is contended that the concept of “new product” adopted by the CFI in Microsoft, being far less exacting than the one adopted in IMS Health, could have unpredictable and perhaps adverse effects on the dynamics of innovation driven markets, in as much as it could privilege “follow-on” innovation to the detriment of investment in “brand new” technological progress.

On this point, Larouche suggested that the CFI conclusions “simply assume that (...) competition on the market (...) is preferable” to “breakthrough innovation” without considering, however, whether this choice was actually compatible with the need to support the drive of the industry leader as well as of its competitors to continue innovating in high-tech markets, especially by “pushing” them, in substance to engage in forms of “radical innovation” and thereby to break away from a “common technological environment.”

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133 Id., para. 650.
135 2007 Microsoft judgment, para. 656.
140 Id., p. 9.
141 Ibid.
Finally, in respect of “objective justification”, the CFI, perhaps unsurprisingly, rejected Microsoft’s allegations that its refusal could have been prompted by “objective factors”, i.e. the need to protect the value of its investment and its incentive to innovate. The Court held that Microsoft had put forward only “theoretical” pleas and that, in any event, the scope of the obligation to disclose interoperability information resulting from the 2004 decision did not enable competitors to supply a “replica” of Windows and was in any event consistent with a “common practice” in the industry. It added that, rather than hampering it, access to these protocols had the potential to reinforce Microsoft’s own drive to innovate, if it wanted to countervail competition from alternative suppliers who would take advantage of the available information.

However, it could be argued that this approach, despite being capable of avoiding any “hold up” in the development of secondary products, could result in the “distortion of incentives” to future technical development: it was suggested that even if technology trading mechanisms were fully efficient, neither the original nor the “follow on” innovator would receive a full reward for their investment efforts. The “first” innovator, on the one hand, could not reap sufficient revenue to reflect the “full value”, both economic and social, of its invention, and the second-generation inventor, on the other hand, would be discouraged from continuing to invest in new, potentially breakthrough forms of innovation.

Against this background, it is contended that the CFI should have analysed more closely the impact of the obligation to disclose the copyrighted specifications on the incentive to innovate of the applicant. Although, in the light of Article 230 EC Treaty, its powers are limited to a supervisory jurisdiction, it is submitted that a more careful assessment of these implication would have allowed the Court to limit the risk that this potential for distortion could play against the first generation innovator.

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142 2007 Microsoft judgment, para. 698.
143 Id., para. 701-702.
144 Id., para. 702.
145 Id., para. 711.
Strictly related to these considerations is the CFI’s examination of the “efficiency defence” put forward by Microsoft. The Court accepted the Commission’s finding that any efficiency-enhancing effects of Microsoft’s practice, especially in terms of creating stronger incentives to innovate as discussed above, should have been weighed against the impact of its refusal to disclose interoperability protocols on the overall development of the work group server OS market. On this point, the Commission had stated in its 2005 Discussion Paper that, for *prima facie* abusive conduct to be justified on account of its efficiency-enhancing effects, four conditions must be fulfilled: the practice must result in, or be likely to lead to, efficiencies and be indispensable to attain them. It must also be shown that consumers are able to reap these benefits and, finally that the conduct is not able to eliminate competition from a substantial part of the relevant market.

Although to date no judgment has recognised that *prima facie* exclusionary conduct could be justified on grounds of efficiency, it is noteworthy that similar considerations have played a part on the assessment of other forms of abusive behaviour, such as loyalty discounts and rebates. The ECJ recognised in *Portugal v Commission* that even dominant undertakings could offer discounts or rebates to their customers calculated exclusively on the basis of the volume purchased by each buyer, since making larger purchases of a given product or services allowed the buyer and the seller to gain economies of scale arising from the reduced transaction costs. Therefore, they would be allowed to accord lower average unit prices to larger purchasers of a given product, unless the system was not operated in a discriminatory or otherwise abusive manner.

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150 See 2004 *Microsoft* decision, para. 783; also 2007 *Microsoft* judgment, para. 705 ff. See e.g. Larouche, “The European Microsoft case at the crossroads of competition policy and innovation”, cit. (footnote 62), p. 12.
151 *Id.*, para. 84.
155 *Id.*, para. 51.
156 *Id.*, para. 52.
In her Opinion in the British Airways appeal judgment\(^{157}\) AG Kokott suggested that the assessment of rebate or discount schemes, whether based on quantity or on other factors,\(^{158}\) should depend on two objective criteria. It should be demonstrated that, firstly, the scheme prevented competing suppliers from accessing the market and therefore customers from choosing between alternative sources of supply, and, secondly, that there was no “objective economic justification for the rebates or bonuses granted”,\(^ {159}\) because any foreclosure effect could not be “compensated (…) for, or more than compensated for, by efficiency advantages which also demonstrably [accrued] to consumers.”\(^ {160}\)

The ECJ\(^ {161}\) accepted this framework for analysis and held that, regardless of the formal definition given to the rebate scheme, its legality should be scrutinised in its economic and legal context and focus on its actual impact on competition and consumers.\(^ {162}\) If the scheme had “exclusionary effects (…) [which bore] no relation to advantages for the market and consumers”, or went “beyond what [was] necessary (…) to attain those advantages, that system must be regarded as an abuse.”\(^ {163}\)

In the light of the British Airways judgment, and despite the undeniable differences between the two cases, it could be argued that the CFI in Microsoft, rather than dismissing the applicant’s arguments as “vague”, should have engaged in the analysis of the implications of the remedy imposed by the 2004 decision for the applicant’s incentives to innovate. As was explained above, imposing an obligation to license intellectual property rights to competitors could have adverse effects on the perspective of “reward” for their holder’s investments\(^ {164}\) and should therefore be carefully assessed not so much vis-à-vis the innovation trends of the overall industry, as suggested by the CFI, but against the drive of the dominant undertaking to invest in future research and development.\(^ {165}\)

It is suggested that the CFI was heavily influenced by the similarities between Microsoft and Commercial Solvents and especially by the fact that in both cases the applicant had discontinued an existing pattern of


\(^{158}\) Id., para. 59.

\(^{159}\) Id., para. 42.

\(^{160}\) Ibid.

\(^{161}\) Case C-95/04, British Airways v Commission, [2007] ECR I-2331.

\(^{162}\) Id., para. 86.

\(^{163}\) Ibid.


\(^{165}\) See e.g. Kitch, “The nature and function of the patent system”, (1977) 20 J. Law & Econ. 265 at 278.
supply of “inputs” considered to be “essential” to long-standing customers.\textsuperscript{166} However, it is argued that the application of standards developed for the interruption of supply of “raw materials” to cases involving copyrighted input in highly technological markets may not be an entirely appropriate solution.

It emerges from \textit{Commercial Solvents} that the ECJ was concerned with avoiding that the applicant, to pursue its plans to vertically integrate the production of raw components together with that of derivative products, could extend its market power from the upstream to the downstream market and thereby put its customer out of business. Consequently, it could be argued that the very tangible risk that the applicant could leverage its market power on the downstream market “trumped” any other considerations, even those related to supposed efficiency gains.

Against this background, it is submitted that this approach appears very difficult to reconcile with the peculiar nature of the IT industry, which is heavily dependent on innovation and on the steady flow of the necessary investment.\textsuperscript{167} It is suggested that since obliging the owner of copyrighted inputs to “share the fruits of its labour” with its competitors could endanger its incentive to engage in research and development, the antitrust authorities should carefully consider whether in the circumstances of each case imposing a duty to licence for the purpose of boosting competition would benefit future technical development and thereby increase consumer welfare.\textsuperscript{168}

It is added that the position currently adopted as regards the “efficiency defence” does not seem capable of address fully these concerns. On this point, it was argued that “putting the efficiency defence at the tail end of the analysis” places dominant undertakings under a significant burden of proof by requiring them to demonstrate that anticompetitive practices having adverse effects on consumer welfare could actually not be caught by Article 82 on account of their efficiency

\textsuperscript{166} See 2004 \textit{Microsoft} decision, para. 578-584; see also 2007 \textit{Microsoft} judgment, para. 703.
\textsuperscript{168} See e.g. Glader, cit. above (footnote 28), p. 294-295.
enhancing effects.169 Also, the CFI’s approach, being focused on the short term impact of the practice on the patterns of the industry as a whole, does not seem to allow for any assessment of its impact on the incentive to invest and innovate of the dominant undertaking. Consequently, it could be argued that the current concept of “efficiency defence” is not only difficult to satisfy but also inherently unsuitable for the analysis of the impact of a duty to disclose on the future innovation plans of the industrial leader as well as on the overall trends of development of the market.170

In the light of the above analysis, it can be concluded that the Microsoft case confronted the CFI with the problems arising from applying existing standards developed for more “traditional” industries to conduct affecting highly innovative markets and demonstrated that the existing conditions laid down in the case law may not be entirely suitable to practices taking place in highly competitive markets, where it is indispensable to consider not only the short term impact but also the long term effects of allegedly exclusionary practices on the incentives to invest in research and development.171 The next section will consider the guidelines for the assessment of exclusionary conduct laid down by the Commission in 2008172 with a view to assess the extent to which the future directions of the Commission’s enforcement policy are capable of addressing these concerns.

The Commission 2008 Guidance and highly technological industries: a bundle of unresolved questions?

Toward the 2008 Guidance: high hopes for a more “economic-based” approach to Article 82 EC Treaty?

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Section 2 illustrated how the approach adopted by the Commission and the CFI in *Microsoft* and argued that it may not be entirely appropriate to adjudge the compliance of refusals to grant IP licenses in technological markets beyond the circumstances of that case. It was also argued that the Commission and the Court’s reliance on standards developed in the context of “traditional” industries, and especially in respect of the refusal to supply “raw materials”, could increase the risk of “distorting” the incentive to invest in further development and encourage competition based on “follow on”, “replica” innovation rather than on the development of a new “breakthrough” technology.

The elaboration of the 2008 Guidance on the enforcement priorities in the application of Article 82 EC Treaty therefore provided the Commission with a significant opportunity to address the concerns raised by the case law. Already in its 2005 Discussion Paper the Commission had reiterated that refusals to deal with other firms may only “exceptionally” be abusive. It specified that this could occur in a number of cases ranging from the interruption of existing commercial relations with a competitor to the refusal to grant to a rival an IP licence regarding “valuable” information to, lastly, the denial of access to an “essential” facility such as network or other physical infrastructures that are necessary to operate on the same or on a neighbouring market. The Commission would be required to show that the refusal concerned an input that was necessary for the buyer to perform a specific business activity and was therefore such as to foreclose competition on a downstream market, either by driving competitors out of the market or by preventing potential rivals from attempting to enter it.

 Having regard to refusals to deal with rivals, the Discussion Paper differentiated conduct affecting existing customers from practices concerning “new buyers” and in that context drew a line between conduct affecting tangible property and the refusal to grant intellectual property licences. In respect of refusals to deal with “new buyers”, the Commission stated that five conditions would have to be satisfied to establish an infringement of Article 82: the practice must constitute a “refusal to supply”; the supplier must be dominant on the market for the supply of the

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175 *Ibid*.
176 *Id.*, para. 209.
178 *Id.*, para. 215.
product in question and the latter must be “indispensable”; the refusal must also have market distorting foreclosure effects and must not be objectively justified.

The “indispensability” requirement was read as meaning that the “duplication” of the input in question would be “impossible or excessively difficult either because it is physically or legally impossible to duplicate or [that] (...) a second facility (...) would not generate enough revenues to cover its costs.” Having regard to the market distorting foreclosure effects, the Paper stated that their assessment would depend on the extent to which the practice had an adverse impact on the pre-existing levels of competition on the relevant market, in the light of the number of remaining competitors, the identity and the size of the excluded firm.

In relation to the concept of objective justification, the Commission acknowledged the possibility even for a dominant undertaking to refuse supplies to buyers unable to show “appropriate commercial assurances” or for the purpose of recouping the investment made to manufacture the output. The Discussion Paper made clear that an additional condition would have to be met for the purpose of a finding of abuse, when the refusal affected IP licences: the conduct must prevent “the development of a market for which the licence is an indispensable input, to the detriment of consumers.” In the light of the IMS Health preliminary ruling the Commission added that this condition would be fulfilled if the firm seeking the licence does not plan only to replicate existing goods or services but intends to manufacture “new products” for which potential consumer demand existed.

However, consistently with the Microsoft 2004 decision, the Commission added that the refusal to grant access to technologies necessary for “follow-on innovation may be abusive even if the licence is not sought to directly incorporate the technology in identifiable new goods and services” but only to improve available products. The Commission emphasised that consumers should be allowed to benefit from “innovation brought about by the dominant undertaking’s competitors”, thus subscribing in substance to a view of technical development and competition as

179 Id., section 9.2.2.
180 Ibid.
181 Id., para. 229.
182 Id., para. 231-232.
183 Id., para. 234.
184 Id., para. 235.
185 Id., para. 239.
186 Ibid.
187 Id., para. 240.
188 Ibid.
a “cooperative process to which all undertaking, even less efficient ones, should be allowed to participate.”

Finally, the Discussion Paper briefly dealt with the refusal to supply interoperability information and stated that it may not be appropriate to subject this practice to “the same high standards for intervention” applicable to refusals to grant IP licences. Accordingly, it was stated that, although there was no “general obligation” even for dominant companies to ensure interoperability, denying access to interface protocols would infringe Article 82 EC Treaty if it could be shown that as a result of it the dominant firm was able to marginalise other suppliers from a related market and therefore extend its lead to it.

It emerges from this brief analysis of the 2005 Discussion Paper that the Commission was keen to adopt a rather interventionist stance in respect of refusals to deal with rivals, including the denial of IP licenses. Having regard to access to information ensuring interoperability between a “de facto standard” and alternative products in markets where compatibility constituted a key factor for the continuing existence of competition, it is suggested that, although the Discussion Paper expressed concern for the potential impact of forced disclosure on future investments, the standards put forward by the Commission seemed more generous in relation to interoperability information, including interface protocols in the software industry than that laid down in IMS Health, thus subordinating the needs for innovation to the continuation of supply of alternative, but not “new”, products.

The next section will assess the extent to which the 2008 Guidance has marked a marked progress toward a more “economics-based” approach to the interpretation of Article 82 EC Treaty, especially in relation to exclusionary conduct in highly technological industries.

The 2008 Guidance and the legacy of ‘Microsoft’: nil novum sub soli?

Given the limited scope of this article, the above section could only give a very brief account of the 2005 Discussion Paper. Nonetheless, it appears from it that the

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189 See, inter alia, Glader, cit. (footnote 28), pp. 44-45.
191 Id., para. 241.
192 See e.g. Ong, “Building brick barricades and other barriers to entry: abusing a dominant position by refusing to licence intellectual property rights”, (2005) 26(4) ECLR 215 at 224.
193 Ibid.
Commission, despite being aware of the potentially adverse implications of forced disclosure of inputs covered by intellectual property rights, was inclined to adopt a rather generous approach in the application of Article 82 to refusals to grant licences to rivals, especially concerning interoperability information. It is submitted that the rationale underlying the enforcement priorities does not appear to have significantly changed in the 2008 Guidance.\footnote{2005 Discussion Paper, para. 4.}

As a general point, the Commission stated that its enforcement would seek to protect consumer welfare by targeting conduct hampering the proper functioning of the market by prejudicing especially the “efficiency and productivity which result from effective competition between undertakings”.\footnote{2008 Guidance document, para. 5.} Its action is, therefore, likely to concentrate on “safeguarding the competitive process in the internal market” and on preventing dominant undertakings from “exclud[ing] their competitors by any other means than competing on the merits of (...) products or services (...).”\footnote{Id., para. 6.}

Having regard specifically to refusals to deal, the 2008 Guidance reiterates that all undertakings, including those enjoying market power, are free to select their business partners.\footnote{2008 Guidance document, para. 75.} Therefore “intervention on competition law grounds requires careful consideration” when it could result in the imposition of an obligation to deal with other firms and could jeopardise the incentive to invest in new technologies.\footnote{Ibid.} The Commission expresses concern that forcing dominant firms to “share the fruits of their labour” may undermine consumer welfare by hampering their drive to innovate as well as encouraging competing suppliers to “free ride” on the investments made by a powerful rival.\footnote{Ibid.}

In the light of these considerations, the 2008 Guidance states that a refusal to deal with another firm active on a “downstream market”, namely a market “for which the refused input is needed in order to manufacture a product or provide a service”\footnote{Id., para. 76.} will constitute an “enforcement priority” only if three requirements are satisfied: the input in question must “be objectively necessary in order to compete effectively” on the market concerned; its refusal must be “likely to lead to the elimination of effective competition on the downstream market” and finally, must be capable of leading to consumer harm.\footnote{Id., para. 81.}
In relation to the requirement of “objective necessity”, the Guidance states that an input is likely to fulfil this condition if “there is no actual or potential substitute” for it allowing competing suppliers “to counter—at least in the long term—the negative consequences of the refusal.” The Commission will concentrate on whether it is possible for alternative suppliers to duplicate the input in question and thereby exert a degree of competitive pressure on the dominant undertaking.

However, this concept may be contrasted with the notion of “indispensability” arising from the case law and crystallised in the 2005 Discussion Paper. The Commission had taken the view, in the light of the Bronner judgment, that an input would be indispensable if without it “companies cannot manufacture their products or provide their usual services” and its duplication would be “impossible or extremely difficult either because it is legally or economically impossible” to do so or because the additional facility would not “generate enough revenues to cover its costs.”

It is argued that the 2008 Guidance may have been influenced by the notion of “indispensability” prevailing in Microsoft, which, rather than focusing on whether the interoperability protocols could be “duplicated” by competing suppliers, emphasised the importance of interoperability to enable competing suppliers to operate viably on the relevant market. Against this background, it is suggested that this view of “objective necessity” appears far more “liberal” than the concept of “indispensability” resulting from Bronner since it seems to concentrate more on the possibility for competitors to remain viably on the market without accessing the input or information at the expense of an examination of whether alternative suppliers can “duplicate” that “necessary” proprietary input. Also, it does not appear to give sufficient weight to the availability of alternatives to compulsory access that allow competitors to continue operating profitably on the relevant market, such as “reverse engineering”.

The influence of Microsoft on the 2008 Guidance emerges also from paragraph 84 of the document, according to which the interruption of an existing level of supply of “necessary” inputs would be “more likely to be found to be abusive than a de novo refusal to supply.” According to the Commission, the fact that the dominant

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203 Id., para. 83.
204 Ibid.
206 Id., para. 229.
207 See e.g. case C-7/97, Bronner GmbH v Mediaprint, [1998] ECR I-7791, para. 41, 43-44.
208 See 2007 Microsoft judgment, para. 229; see also para. 284 and 429-430.
209 Id., para. 381, 388-389.
210 See, mutatis mutandis, id., para. 128, 147; see also para. 432.
211 2008 Guidance, para. 84.
undertaking has “found it is in its interest to supply” in the past constitutes evidence that it does not regard the continued supply as threatening its incentive to innovate or the value of its investment.\(^{212}\) This “presumption” could only be rebutted by showing an “actual change” of the circumstances as a result of which continuing to grant access to the input is no longer capable of securing “adequate compensation” for the investment.\(^{213}\)

It is suggested that this approach appears consistent with the principles enshrined in the Commercial Solvents judgment\(^{214}\) which had heavily influenced Microsoft and with the view that the interruption of the supply of the protocols would constitute abusive behaviour even though it had not resulted in the “immediate marginalisation” of competing work group server OS producers but was only “likely to result” in the elimination of competition.\(^{215}\) However, it could be argued that this view would not be appropriate for the assessment of these practices in highly technological industries where forcing the supply of valuable inputs could adversely affect innovation.\(^{216}\)

Having regard to the other requirement of eliminating effective competition, the 2008 Guidance states that the fulfilment of this condition would depend on a number of factors, such as the degree of market power enjoyed by the dominant undertaking, the extent to which the latter could act appreciably independently of alternative suppliers and whether a significant number of customers had been affected by the conduct in question.\(^{217}\)

This approach is substantially consistent with the 2005 Discussion Paper, according to which a refusal to deal would be likely to result in “market distorting foreclosure effects” if, having regard to the market conditions, the number and the size of alternative suppliers and affected customers, and the likely elimination or marginalisation of a competitor are likely to have an adverse effect on competition.\(^{218}\)

It may, therefore, be expected that factors such as the market shares of competing firms, their trends and the conditions of entry or expansion would be taken into account by the Commission.

In relation to the requirement of likely consumer harm resulting from a refusal to deal, the Commission is likely to investigate cases in which “for consumers, the likely negative consequences of a refusal to supply in the relevant market outweigh over

\(^{212}\) Ibid.

\(^{213}\) Ibid.

\(^{214}\) 2007 Microsoft judgment, para. 320, 326.

\(^{215}\) Id., para. 421; see also para. 482, 562-563.

\(^{216}\) See, e.g., case note to T-201/04, Microsoft v Commission, (2008) 44(3) CMLRev 863 at 882.

\(^{217}\) 2008 Guidance, para. 85.

time the negative consequences of imposing an obligation to supply.”\textsuperscript{219} The 2008
Guidance states that this is likely to occur not only when, as the ECJ had affirmed in
\textit{IMS Health},\textsuperscript{220} the refusal would prevent the undertakings seeking access to the input
from offering “new” products or services, namely, output that is not a “duplicate” of
what is already available on the relevant market\textsuperscript{221} but also if it hampered their ability
to engage in “follow on innovation”.\textsuperscript{222} A refusal to grant IP licences would therefore
become an enforcement priority when, without preventing the emergence of “novel”
products, it resulted in competition becoming unable to offer “improved goods or
services for which there is a potential demand” or which “contribute to technical
development”.\textsuperscript{223}

The Commission, therefore, confirmed that it would take action to tackle
conduct jeopardising “second generation” technical development and, thereby,
hampering competition “on the market”. Its statement is, therefore, consistent with
the literal interpretation of Article 82 (b) of the EC Treaty, adopted by the CFI 2007
\textit{Microsoft} judgment, according to which a refusal to grant an IP licence would infringe
the antitrust rules when it limited “production, markets or technical development to
the prejudice of consumers”.\textsuperscript{224}

Finally, in respect of the concept of “objective justification”, the Guidance
document is silent on the possibility of a dominant firm claiming that its \textit{prima facie}
exclusionary conduct may be justified on the grounds of its being necessary to
recoup the investment made to develop the input concerned.\textsuperscript{225} In relation to the
concept of “efficiencies”, instead, the Guidance reiterates the four condition test laid
down in the 2005 Discussion Paper\textsuperscript{226} and recognises the possibility for a dominant
undertaking to claim that its refusal to grant access to an “indispensable input” is
necessary to protect its incentive to further innovate or to safeguard the value of its
investment from possible negative factors, including the “development of follow-on
innovation by competitors.”\textsuperscript{227}

The concept of “efficiency defence” laid down in the 2008 Guidance could,
therefore, be criticised not only because it places a dominant undertaking under a
considerable onus to prove that conduct liable to hamper competition and harm

\textsuperscript{219} 2008 Guidance, para. 86.
\textsuperscript{220} Case C-418/01, \textit{IMS Health v NDC Health}, [2004] ECR I-5039, para. 43.
\textsuperscript{221} Id., para. 87.
\textsuperscript{222} Ibid.
\textsuperscript{223} Ibid.
\textsuperscript{224} 2007 \textit{Microsoft} judgment, para. 643.
\textsuperscript{225} Id., para. 28-29.
\textsuperscript{226} Id., para. 30.
\textsuperscript{227} 2008 Guidance, para. 89.
consumers would, ultimately, have efficiency enhancing effects;\(^{228}\) it also appears to emphasise a "consumer driven" notion which would not allow antitrust enforcers to gauge the long term implications of their intervention for the incentives for the dominant company and its rivals to innovate.\(^{229}\)

In addition, and perhaps unsurprisingly, the 2008 Guidance states that the interruption of an existing supply relationship may be less likely to benefit from the defence. Consequently, it could be criticised again for its emphasis on protecting "follow on" innovation at the expense of safeguarding the value of the innovator’s investment and of its drive to engage in future innovation.\(^{230}\) Consequently, it could be argued that it would not fully reflect the longer term implications of forced disclosure on technical development in high tech markets.

In the light of the above analysis, it is contended that, while it may be early to gauge the full impact of the 2008 Guidance document on the future application of Article 82 of the Treaty to exclusionary abuses, there are a number of reasons why the suggested approach may not be entirely appropriate to ensuring effective innovation-driven competition in highly technological markets: it seems to focus more on the short term impact of refusals to deal than on their implication for the affected market in the long haul and prefers a seemingly lenient view of “objective necessity” and a rather restrictive test for the “efficiency defence”.

It may be wondered whether the application of a more rigorous approach to the concept of “indispensability” could have had some impact on the outcome of the Microsoft appeal. It may be recalled that, perhaps surprisingly, the CFI did not assess in detail whether the availability of “open source” software or the possibility to “reverse engineer” the de facto standard PC OS could be suitable alternatives to the forced disclosure of the interconnection protocols.\(^{231}\) Against this background, it could be argued that an interpretation of this concept in a manner more consistent with the IMS Health decision, being dependent on “objective factors”, such as the presence of physical or legal obstacles to the duplication of the "essential input”, would have obliged, at the very least,

\(^{228}\) Supra, section 2.3. See e.g. Larouche, “The European Microsoft case at the crossroads of competition policy and innovation”, cit. (footnote 62), p. 12-13.
\(^{229}\) Ibid.
\(^{230}\) 2008 Guidance, para. 89.
\(^{231}\) Id., para. 381; see, e.g., case C-7/97, BronnerGmbH & Co v Mediaprint, [1998] ECR I-7791, para. 47.
the Court to examine more closely the Commission’s conclusions on this issue.\textsuperscript{232}

On this point, it is suggested that, although due to the overwhelming market power enjoyed by the applicant the Court would have probably reached the same conclusions, adopting a more objective and thus more exacting assessment of the concept of “indispensability” could have an influence on future cases, perhaps not involving super-dominant companies, and could therefore limit compulsory sharing only to cases when it is objectively not possible to secure an alternative to them due to physical or legal obstacles or serious financial consequences flowing from duplicating the essential inputs.\textsuperscript{233}

In relation to the concept of “harm to consumer welfare” suggested by the 2008 Guidance, it is acknowledged that assessing the degree of novelty of “second-generation” inventions, as required by the IMS notion of “new product”, may not be straightforward. However, it is submitted that, to require that the Commission demonstrates that the undertaking seeking access wishes to develop and supply a product displaying a significant degree of “novelty” \textit{vis-à-vis} products already available, would go some way toward ensuring that the needs of technical development and those of genuine competition are appropriately taken into account and weighed against one another. Commentators suggested that this appraisal would offer “a minimal protection of the interest of the (…) IPR holder”,\textsuperscript{234} by confining the reach of Article 82 to refusals preventing competing suppliers from seeking access only for the purpose of duplicating the same “basic” software and thereby minimising the risk of “cloning” the industry standard.\textsuperscript{235}

Nonetheless, in the light of the 2008 Guidance, it seems unlikely that the Commission will backtrack to a more conservative view of refusals to grant IP licences in the near future. Consequently, it may be concluded that the Microsoft litigation, despite its inherently extraordinary circumstances, has strongly influenced the current approaches to exclusionary behaviour. However, it is questionable whether this outcome, suitable though it may be for practices adopted by “super-

\textsuperscript{234} \textit{Id.}, p. 354.
\textsuperscript{235} \textit{Id.}, p. 339.
dominant” companies, may be equally appropriate in other cases, especially those concerning refusals to license in innovation driven industries and not involving firms enjoying market power to the same extent as Microsoft.

Refusals to deal in highly technological markets: where to now? Tentative conclusions

The previous sections analysed the approach to refusals to deal by dominant undertakings under Article 82 of the EC Treaty resulting from the *Microsoft* litigation and attempted to place it in the wider context of the needs of innovation driven competition characterising highly technological, R&D driven industries. This article argued that the rather generous interpretation of the “indispensability” and the “new product” conditions could jeopardise the incentive of the holder of the “leading format” to continue innovating its products. It was pointed out that recourse to forced disclosure could overtime hamper the incentive to innovate throughout the industry since it would, in substance, encourage “follow on”, emulation-based development and, thus, divert resources away from efforts to create new “breakthrough” products.

The article considered, then, whether the recent Guidance on the enforcement priorities of the Commission in the application of Article 82 could have gone some way toward redressing this perceived “imbalance” between protecting competition on the market, especially by means of boosting “second generation innovation”, and furthering competition for the market. The analysis of the 2008 document highlighted a number of similarities with the approach adopted in *Microsoft* as well as a number of potential pitfalls in the Commission’s position. It was contended that too lenient an interpretation of the “new product” requirement could *de facto* deprive it of its ability to “balance” of the needs of genuine competition against the demands of the pursuit of innovation and eventually hamper consumer welfare.

For this reason, it was argued that a “return” to the concepts of “indispensability” and of “new product” emerging from the *IMS Health* preliminary ruling could go some way toward balancing the needs of technical progress against

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237 *Id.*, para. 39; see e.g. Geradin, “Limiting the scope of Article 82 EC: what can the EU learn from the US Supreme Court’s judgment in *Trinko* in the wake of *Microsoft*, *IMS* and *Deutsche Telekom*?”, (2004) 41 (6) CMLRev 1519 at p. 1541.
genuine competition, especially on markets for complementary products. However, in the light of the decided commitment to the “interventionist” stance adopted in the 2008 Guidance, it was submitted that such a move seems unlikely at this stage.

Against this background it is concluded that while, due to its exceptional features, the conclusions reached in the Microsoft judgment could not be easily applied beyond its merits, its indirect impact should not be downplayed.\textsuperscript{238} Although it is premature to assess its overall implications for future decisions, it is clear that the 2008 Guidance constitutes evidence of the weighty legacy of the 2007 judgment for the interpretation of Article 82. It also suggests that, for all the initial commitments toward a more “economics-based” approach to exclusionary behaviour,\textsuperscript{239} a more flexible, more realistic and thus more appropriate framework for the analysis of these practices, even in “less traditional” industries, may be yet to emerge.

\textsuperscript{238} See e.g. case note to T-201/04, Microsoft v Commission, judgment of 17 September 2007, (2008) 45(3) CMLRev 863 at p. 893-894.

\textsuperscript{239} See “Exclusionary abuses of dominance—the European Commission’s enforcement priorities”, speech given at the Fordham University Symposium, 25 September 2008, SPEECH/08/47.