Response to DG Competition Discussion Paper on Article 82

Edward J. Black
President & CEO
Computer & Communications Industry Association
666 Eleventh Street, NW
Washington, DC

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EXECUTIVE SUMMARY

In December 2005, DG Competition published a discussion paper on the application of Article 82 to exclusionary abuses, and requested comments from all interested parties. This report provides our initial response to the paper. It is not an exhaustive response. Rather, it focuses on areas where our contributions appeared to offer relevant insights. It should not be assumed that CCIA or its members are without opinion on subjects not addressed herein. Overall, we agree with the direction and approach of the paper, in that it evaluates exclusionary conduct through the net impact on competition. With proper emphasis on economic effects, the paper balances the potential for abuse of market power by a dominant firm with desirable efficiencies that increase consumer welfare. In this respect, the paper offers a sound framework for analyzing many practical examples of exclusionary conduct.

In the “Market definition” section, the Commission identifies the purpose of market definition as systematically identifying the competitive constraints faced by an undertaking. We agree with the Commission’s competition-focused analysis and emphasize the need for sufficiently forward-looking, flexible metrics in order to account for the speed and uncertainty that characterize high-tech markets.

In the “Dominance” section, the Commission reviews standards of dominance that are typically required for exclusionary conduct to have anticompetitive effects. We agree with the general presumption that the greatest exclusionary effect arises when a dominant firm has high market share in an industry with high entry barriers. We encourage the Commission to consider other possible cases of abuse, such as the targeted foreclosure of rivals that constrain the abuse of market power through an innovative business model or product portfolio. In this section, we also agree that financial strength signals dominance and may acts as an entry barrier; we assume that this concept will be consistent with the interpretation of financial predation outlined in the “Predatory pricing” section.

In the section “Framework for analysis of exclusionary abuses,” the Commission outlines a general framework that applies to the analysis of all forms of exclusionary conduct. This section includes examples of abusive and efficient effects that the conduct may have, and indicates how several cost-based benchmarks can be used in empirical tests. We agree that market characteristics such as network effects and scale/scope economies often enhance the foreclosure effects of all exclusionary conduct. To this list we would add switching costs, which are similar to network effects in that they focus competition into one period of especially strong rivalry among firms. If exclusionary conduct allows a dominant firm to capture large fractions of demand in the current period, its dominance may be extended far into the future. In response to this section, we also have several detailed concerns about cost accounting principles that could be used to manipulate the results of empirical tests.

This section also outlines a safe harbor for price-based exclusionary conduct that would not foreclose an “equally efficient” competitor. We agree that efficiency is an important factor in assessing the foreclosure effects of exclusionary conduct. However, we are concerned about the as-efficient standard underlying much of the analysis. Economies of scale affect efficiency and in many industries a small rival is not likely to
have the same cost structure as a dominant firm. Furthermore, it also seems likely that a
less efficient rival may serve as an important constraint on the abuse of market power by
a dominant firm. For purposes of efficiency comparisons among firms, the Commission
may want to interpret efficiency with respect to firms’ cost curves, rather than the
particular point at which they are operating on the cost curve.

In the “Predatory pricing” section, the Commission discusses exclusionary
conduct via predatory pricing, defined as a profit sacrifice by a dominant firm that
hinders the maintenance or the degree of competition. We agree that empirical evidence
is necessary to determine net competitive effects, yet there may be difficult practical
considerations in the proposed tests. For example, it seems clear that standards based on
short-term profit sacrifice may depend on price-cost comparisons that depend on
ambiguous principles of cost accounting. For simplicity, we suggest some form of
bright-line test that avoids the cost accounting issues that are likely to arise in performing
these tests. For example, if the effective price of incremental units falls below zero, it
seems clear that the dominant firm intends to distort the nature of competition at the
margin. Because it does not rely on cost data, this type of test would have many practical
advantages.

We also believe that the concept of financial predation is meaningful and likely to
arise in many cases; if so, the Commission should be as specific as possible about what
standards will be used to evaluate relevant evidence. To avoid the possible abuse of
standards for financial predation, we suggest that the burden of proof be placed on rival
firms to document specific areas of financial disadvantage (e.g., access to external
financing, terms of borrowing) and to show how these disadvantages exacerbate the
effects of exclusionary conduct by a dominant firm.

The “Single branding and rebates” section analyzes conduct involving single
branding (i.e., exclusive dealing) and both conditional and unconditional rebates. We
agree with the Commission that conditional rebates granted on all purchases after
meeting the threshold may have a strong foreclosure effect, which can be enhanced if
thresholds are customized to individual buyers. As with the price-cost tests mentioned
above, we have some detailed concerns with the implementation of the empirical tests
based on “commercially viable” and “required” share. We also believe that the
Commission should consider competition for individual units, in addition to
“commercially viable” amounts, as relevant for the analysis of exclusionary conduct.
Competition at the margin is strengthened by competitive pricing of incremental units,
which is especially distorted on the last units purchased before the rebate threshold is
reached.

This section also discusses several efficiency defenses that can be used to respond
to allegations of exclusionary rebates. In addition to the existing examples, we would add
the possible efficiencies in promotional services induced by conditional rebates and also
the long-run efficiencies in output planning and capacity building that may arise from
shifting demand risk between supply-chain partners. The Commission may also want to
include nonexclusionary alternatives for each category of efficiencies, and require
defendants to explain why the corresponding nonexclusionary alternatives have not been
utilized.
In reference to the “Refusal to supply” section, CCIA generally agrees with the approach of the Commission. We confine our comments to the refusal to license intellectual property rights. Because interoperability is at the heart of healthy competition in many high-tech markets, disputes concerning proprietary interfaces merit special consideration.

The “Aftermarket” section highlights the anti-competitive effect of supplier’s attempt to reserve the secondary market for itself. Because of its heightened relevance to technology markets we applaud the Commission’s recognition of the importance of competition in these secondary markets. We identify the importance of open systems, highlighting how interface specifications can be used to limit interoperability and foreclose viable competition.

3. Market Definition in Article 82 Cases

We agree with the Commission and feel that there are situations where the SSNIP-test (which carries the risk of the “cellophane fallacy”) fails in accurately defining the relevant market. Any metric (or set of metrics) developed by the Commission to define the scope of a market needs to be sufficiently flexible as to be applicable to any unforeseen circumstances that may arise. In particular, the dynamic nature of high-tech industries places considerable importance on market definition being sufficiently forward looking in order to anticipate “uncommitted” entrants as possible competitors. However, these future extrapolations must adequately reflect that significant barriers to entry still exist in these markets.

4. Dominance

4.1 Introduction

In general, we agree with the definition of dominance as the absence of restraints from competition, which results in greater potential for the abuse of market power. Referring to paragraph 24, we also agree that evidence of market power may appear in prices as well as non-price dimensions such as innovation, product quality, or product variety. In this paragraph it may also be useful to clarify what is meant by “effective” competition, perhaps by outlining some of the characteristics of competitive markets. For example, in a competitive market, the fact that firms should not be capable of increasing prices above “the competitive level” traditionally means that they cannot consistently maintain prices above appropriate measures of cost. The benefits of effective competition are less likely to appear if the relevant market contains any of the factors (high market share and barriers to entry/expansion) described in the “Single dominance” section. In this respect, exclusionary conduct by a dominant firm in markets with these characteristics has the greatest potential for harm, and thus deserves the strictest scrutiny.
4.2 Single dominance

4.2.1 Market position of allegedly dominant undertaking and its rivals

We agree that the magnitude and stability of market shares provide useful initial indications of market structure and competitive constraints. However, given the frequent uncertainty over market definition, it seems the degree of dominance should not be as explicitly linked to market share thresholds as it is in paragraph 31. For while we appreciate the Commission’s desire to establish and maintain vigorous competition enforcement, we are apprehensive that the adoption, on a strict basis, of the market share figures proposed in the discussion paper may effect two unfortunate consequences. First, employing a bright-line 50% threshold to define dominance, and a safe harbor of only 25%, may inhibit or discourage growth of firms that could well achieve higher shares via innocuous, or even procompetitive conduct. Second, the Commission’s proposed market share figures, though appropriate under today’s competitive environment, may in the future force the Commission to review and investigate a burdensome number of transactions or firms, thus depleting its resources and possibly infusing delay or uncertainty in the market. We raise these points for the Commission’s consideration.

If market share thresholds must be applied, perhaps they could be simplified (as they are for a monopoly in paragraph 92) into two simple ranges and made slightly more permissive – e.g., 60% share indicates dominance, ≤40% share warrants a safe harbor, in the absence of other independently anticompetitive conduct?

Referring to paragraph 33, we also agree that market share indicators should be qualified with information about product differentiation and other dimensions of competition. The language here also raises a point about constraints to competition that has been discussed in U.S. antitrust policy towards mergers. Rivals with relatively low market share often impose competitive constraints on dominant firms because of their different business model, product portfolio, or cost structure. While their market share may be low, these “maverick” firms are thought to discipline the behavior of dominant incumbents and constrain the abuse of market power. From the dominant firm’s perspective, this makes them especially attractive targets for exclusionary conduct that may not appear particularly harmful to policymakers using simple rules based on market shares.

To further unify an effects-based regulatory standard for mergers and exclusionary conduct, the number of viable firms in the industry could provide another simple proxy for constraints on competition. Thus the potential harm from exclusionary conduct by a single dominant firm would seem to vary inversely with the number of firms remaining in the market. Following the merger analogy, the Commission should be most concerned with exclusionary conduct applied in highly concentrated oligopolies. For example, if successful foreclosure in a duopoly had the same competitive effects as a merger to monopoly, then regulatory standards for these two investigations should be broadly consistent.
4.2.2 Barriers to expansion and entry

We agree with the inclusion of financial strength as a valid barrier to entry, and assume that the analysis of financial barriers to entry will be broadly consistent with the interpretation of financial predation, which identifies access to capital as a meaningful barometer for overcoming predation, outlined in paragraph 120.

We also suggest that the importance, particularly in the software and high-tech spaces, of the network effects and tipping phenomena is such that identifying these factors explicitly as barriers to entry may be warranted. As the Commission has seen, the tremendous power of network effects in industries that rely on end-user interaction, amplified by the well-recognized experience of tipping, are crucial factors for measuring market dominance in high-tech firms.

4.2.3 Market position of buyers

We agree that the market position of buyers has important implications for the analysis of exclusionary conduct by a dominant seller. The Commission may also want to consider separate analysis of conditions in which the exclusionary conduct is explicitly requested by downstream firms, either to resolve some form of contracting externality or to support close coordination among buyers. Many analysts interpret Standard Oil (U.S. 1949) as one such case, where contractual restrictions by a dominant supplier were used to enforce collusion and entry deterrence among downstream distributors.

5. Framework for analysis of exclusionary abuses

5.1 The central concern and proof of foreclosure

Like many economists, we agree that competition policy should protect consumer welfare by preventing conduct that diminishes competition. In this sense, the protection of “competition, not competitors” accurately reflects the consensus of many practitioners of competition law. However, the meaning of competition “on the merits” (which appears in paragraphs 54 and 60) seems to have many different interpretations within the competition law community. For defendants, valid dimensions of competition include all the factors (quality, innovation, interoperability, etc.) mentioned in paragraph 54, along with competition in all of the contractual terms that allegedly have exclusionary effects. One hears the standard defense that rivals are free to offer comparable exclusionary contracts, so that competition “for the market” results in competitive outcomes. Complainants typically respond with an interpretation that narrows the “merits” down to price, quality, and other product characteristics; their view is that contracts can artificially distort the market to foreclose their entry or expansion regardless of what products they offer. This interpretation seems to comport with the discussions in paragraphs 127 and 134. If so, the Commission may want to clarify exactly what is meant by competition “on the merits”.

As explained in paragraph 57, the European Court of Justice avoids the debate over competition “on the merits” in how it defines an “abuse” of exclusionary conduct. Here we agree that exclusionary conduct should be characterized as all conduct that attempts to influence market structure, with abusive conduct limited only to those actions that weaken the degree of competition. The language here (and the discussion in the following two paragraphs) focuses attention on the importance of evaluating the net competitive effects of the conduct. This section outlines two important questions – does the conduct have an exclusionary effect on rivals, and if so does their exclusion distort the market by removing constraints on the abuse of market power? Without specifying whether the conduct is “on the merits” or not, the analysis proceeds directly to the tests of exclusion (did the conduct directly raise rivals’ costs or reduce demand for rivals’ product?) and more importantly to tests of its effects on competition (did the conduct cause output to fall?). If the conduct can be shown to have both exclusionary and anticompetitive effect, then it is sensibly presumed to be abusive.

Referring to paragraph 55, it seems that the Commission gives a strong presumption to 100% pass-through of harm from intermediate buyers to consumers. We prefer the more qualified discussion of pass-through incentives in paragraph 90, where the Commission reasons that pass-through of cost efficiencies depends on existing competition, potential entry, and other factors. There may be, however, grounds to think that incentives to pass on higher prices (harm) may differ from those to pass on lower costs (efficiencies), and if so these conditions seem to deserve a more complete discussion.

Referring to paragraph 59, we agree that market characteristics such as network effects and scale/scope economies often enhance the foreclosure effects of exclusionary conduct. To this list we would add switching costs, which are similar to network effects in that they focus competition into one period of especially strong rivalry among firms. If exclusionary conduct allows a dominant firm to capture large fractions of demand in this period, its dominance may be extended far into the future.

5.2 Price versus non-price based exclusionary conduct

Paragraph 64 provides a list of several cost benchmarks that are likely candidates in applying the hypothetical as-efficient competitor test. These include marginal cost (MC), average variable cost (AVC), average avoidable cost (AAC), long-run average incremental cost (LAIC), and average total cost (ATC). The computation of some of these metrics involves the use of proprietary information from the dominant company that, in general, will not be available to the Commission in the period of initial assessment of the likely foreclosure effects. This renders some importance to the accounting information provided by firms. Two of the cost benchmarks, ATC and AVC, can be estimated with a certain degree of accuracy from publicly available accounting data. Both types of cost appear to play important roles in the Commission’s analysis – the required share test under paragraph 155 is based on ATC, while paragraphs 108-109 name AAC (which in many cases is the AVC) as an appropriate benchmark in detecting predatory pricing.
An important premise of accrual accounting is to correctly match revenues with costs and, thus, to produce a system of measurement that accurately describes firm economic performance. Consistent with this rule, many costs are capitalized and expensed when they generate revenue. However, R&D investments are expensed when incurred, so that the benefits produced by R&D lag the investments. Depending on the industry this R&D lag can be as long as seven years. The variation in the magnitude and timing of firm R&D capital outlays may introduce significant differences, especially over the short run, in the ATC estimates if not properly adjusted for the industry-specific lag.

Referring to paragraphs 65 and 67, we agree that the allocation of fixed cost to different products in a multi-product company may pose difficulties in the calculation of ATC. However, we are more concerned with the consequences of these allocations to the required share test under paragraph 155. The Commission will allocate the fixed costs based on the turnover achieved by different products or according to methods established as industry standards. Allocations based on turnover can be standard for the sector and admissible by the accounting pronouncements, yet still produce biases in ATC estimates. For example, the Commission does not specify whether the turnover allocation of common costs is volume-based or revenue-based. Consider for example a market with a dominant firm and a small rival whereby the competition between the two is for product A. If in a multi-product manufacturing process the dominant company produces another product B, perhaps more innovative and expensive, then revenue-based allocation may shift large portions of the fixed costs to product B. This problem worsens in capital intensive industries with high rates of obsolescence. In that case the fixed cost portion of ATC is quite sizeable. Judicious allocations based on admissible methods may allow the dominant company to implement a conditional rebate system that would foreclose the rival in the market for product A but still guarantee favorable outcomes of the required share test. This comes at no expense since pricing for the innovative product B will be below its ATC but above its AVC.

Referring to paragraph 66, we agree that efficiency is an important factor in assessing the foreclosure effects of a price schedule or a rebate system of the dominant company. However, we are concerned that the as-efficient assumption component of the Commission’s proposed analysis may in certain circumstances cause it to overlook two market factors that often significantly affect the relative success of dominant firms. That is, economies of scale affect efficiency and a small rival may not be as efficient as a big dominant firm. If so, then the Commission may want to interpret efficiency with respect to firms’ cost curves (and thus account for scale/scope economies), rather than the particular point at which they are operating on the cost curve. Furthermore, it also seems likely that even a less efficient rival – a “maverick” firm with attractive qualities unrelated to efficiency, such as the ability to innovate – may serve as an important constraint on the abuse of market power by a dominant firm. While these cases may be rare, they should not be precluded with an “equally efficient” standard that depends on imprecise cost accounting.

We also wish to emphasize that efficiency alone may not be an appropriate factor for measuring dominance in high-tech industries. In such industries, all firms generally incur low incremental costs – manufacturing one salable piece of software – but quite high fixed costs – most notably Research & Development costs. It is this high fixed cost
that exerts the most pressure on high-tech firms, and can have a competition-reducing effect even on efficient competitors in the form of access to capital. We ask the Commission to be aware, as it has been with respect to other components of its analysis (see paragraph 120), that greater access to capital in one or a few firms in this space could be a significant measure of market power that, regardless of competitors’ efficiency, would have anticompetitive consequences.

Given our concerns with the required share test under paragraph 155 (see the comments to paragraph 65 above), we also suggest that the Commission consider an adjustment for economies of scale that could be included in the cost tests. For example, in evaluating the foreclosure effects of a rebate system based on the required share test, the Commission may also consider the ATC of the rival.

5.3 Abuse of collective dominance

Whether tacit or explicit, coordination among firms can result from exclusionary conduct that raises switching costs or barriers to entry. For example, many authors believe that loyalty discounts and other frequent-purchase programs enable firms to reduce consumer price elasticity and soften overall price competition. In this respect, exclusionary conduct by a dominant firm may benefit its rivals even if there is no explicit coordination among them.

5.5 Possible defenses: objective justification and efficiencies

We agree that the dominant firm should be asked to specify one or more efficiency defenses in response to allegations of its exclusionary conduct. As discussed in our comments to section 5.2.5, the Commission should note several broad categories of efficiency defenses and identify non-exclusionary alternatives that could achieve the efficiency goals. As part of any investigation, the Commission should quantify the efficiency gains of the conduct in question, as well as the likely efficiency effects of alternative, non-exclusionary mechanisms. The Commission should consider only those efficiency gains that go beyond that which could be achieved using non-exclusionary mechanisms to balance against any detrimental anticompetitive impacts.

Referring to paragraph 78, the Commission appears to describe a “loss-minimizing” reaction to competition from rivals as a possible efficiency defense. This standard seems excessively broad, in that nearly all firms would characterize their business as threatened to some degree by rivals, so that any exclusionary conduct could justifiably fall under the “meeting competition” defense.

Further, it is not clear that the meeting competition defense is appropriate for addressing non-price related exclusionary conduct. Many forms of exclusionary conduct, for example geographic market distribution, can be instigated by a firm’s desire to minimize losses, and nonetheless have severely deleterious effects on competition. As we explain in greater detail with respect to Predatory Pricing in Section 6.2.5, loss minimization and meeting competition should apply almost solely to price-related conduct, such as predation. Engaging in below-cost, or below-rival, pricing does in fact deserve the meeting competition defense as a valid, procompetitive justification.
5.5.3 Efficiency defense

Referring to paragraph 84(ii), the dominant firm, as part of an efficiency defense, should be called upon to demonstrate that alternative pro-competitive behaviors are not viable alternatives to exclusionary practices. For example, to resolve double marginalization a dominant firm should explain why it imposed an exclusionary conditional rebate contract instead of a non-exclusionary two-part tariff schedule. In its analysis of the conduct, the Commission should consider the use of these alternatives to define hypothetical “but-for” scenarios that could be used as a competitive benchmark. Comparisons of actual market outcomes with estimates of these outcomes under the benchmark scenario can be used to provide empirical evidence that will inform both the liability and damage sides of the matter.

Referring to paragraphs 84(iv) and 91, the phrase “competition in respect of a substantial part of the products concerned” may be ambiguous. We interpret this to mean that in many industries consumers have strong preferences for product variety, so that conduct that forecloses a fraction of products from the market has the potential for severe anticompetitive effects. This belief is consistent with the Commission’s recognition that rivalry among firms is an essential component of economic efficiency, including long-run efficiencies in innovation that arise from having several competing products available at any point in time.

6. Predatory pricing

6.1 Introduction

The tone of paragraphs 93-99 is cautious, which is justified. Vigorous price competition among market participants is a goal of competition enforcement, and the lowering of prices should be carefully examined before being labeled as anti-competitive. Paragraph 95 correctly notes that short-run losses may be a component of a viable long-run business plan that is pro-competitive. For example, a firm might introduce a product in a new field. The product might lose money, and it is possible that the firm had little expectation that the product would be immediately profitable. Nonetheless, the real option value provided by the early entrance into the market, which is not directly observable from accounting data, can justify early loss-making. Without the initial entry, the firm might be precluded from the future benefits of learning effects, which may arise in either consumption or production. Paragraph 96 notes the especially important factor that predatory pricing is inherently a dynamic concept. To the extent that consumers are better off in the short-run from predatory pricing is only part of the relevant welfare analysis; the problem is that the long-term effects of weakened competition might outweigh any short-term gains.

Paragraph 97 contains a brief allusion to financial predation, which is worth exploring in more detail. The paragraph notes that a dominant firm, less dependent on external financing than potential entrants, can engage in predatory behavior. The Commission should expand on this concept. In cases where a dominant firm’s behavior in the product market has effects in terms of financial constraints, this should be addressed.
If, due to anti-competitive behavior by a dominant firm, a firm requires more external financing or has more difficulty obtaining external financing than it would in a competitive market, this effect itself can be seen as a part of the anti-competitive behavior. External finance and internal finance are not perfect substitutes. Approval by external financiers requires surmounting informational barriers: lenders can monitor and influence behavior of borrowers, but they do not have access to the same information as the borrowers, and therefore face both moral hazard and adverse selection problems. As a result, external finance is typically more costly than internal finance, and viable external finance may simply be unavailable in some circumstances. In such an environment, anticompetitive behavior may have a compounded effect. The direct effect of the anticompetitive behavior may be multiplied if it causes an external financing constraint to become more binding, essentially raising rival’s costs.

Certain industries are more prone to financial predation. Borrowers with relatively undifferentiated collateral (e.g., commercial real estate) might find it relatively easy to borrow. Borrowers with highly specialized collateral that might lose value when not used by borrowers with special expertise, or that might lose value as it obsolesces during bankruptcy proceedings, might find it difficult to borrow even for projects that would be profitable in a competitive environment.

In general, the concept of financial predation seems likely to arise in many cases, so that the Commission should be as specific as possible about what standards will be used to evaluate relevant evidence. To avoid the possible abuse of standards for financial predation, we suggest that the burden of proof be placed on rival firms to document specific areas of financial disadvantage (e.g., access to external financing, terms of borrowing) and to show exactly how these disadvantages exacerbate the effects of exclusionary conduct by a dominant firm.

6.2 Assessment

6.2.1 Pricing below average avoidable cost

We agree that price-cost comparisons to indicate avoidable losses may produce ambiguous results that depend heavily on which cost measures are used. For simplicity, we suggest some form of bright-line test that avoids the cost accounting issues that are likely to arise in performing these tests. For example, if the effective price of incremental units (which is easily calculated from data on the magnitude of the rebates and the corresponding threshold purchase levels) falls below zero, it seems clear that the dominant firm intends to distort the nature of competition at the margin. Because it does not rely on cost data, this type of test would have many practical advantages.

6.2.4 Pricing above average total cost

As discussed in our comments to paragraph 66, we are concerned about the presumption that above-cost pricing is generally not exclusionary, so that only equally efficient competitors deserve protection. Economies of scale affect efficiency, so that a small rival is not likely to be as efficient as a large dominant firm. Furthermore, it also
seems likely that a less efficient rival may serve as an important constraint on the exercise of market power by a dominant firm. While these cases may be rare, they should not necessarily be precluded with a strict “equally efficient” standard that depends on imprecise cost accounting. Furthermore, in the case of contracting practices that condition pricing on outcomes in other markets, U.S. courts have recognized the possibility of foreclosure even if prices do not fall below ATC in any one of the markets involved.

6.2.5 Pricing above average total cost

As noted in Section 5.5 above, we wish to suggest that the Commission should confine the “loss minimizing” reaction to competition and the “meeting competition” defense to price-related exclusionary conduct, particularly predation. Firms that face meaningful price competition have a procompetitive reason to reduce their prices, even to below-cost levels, in order to retain market share. In these circumstances, meeting competition is a valid defense to allegations of predation. It is not clear that other forms of exclusionary conduct warrant this same treatment.

7. Single branding and rebates

7.1 Introduction

Referring to paragraph 139, we agree that the primary negative effect of single-branding and rebates is the foreclosure of the market to competing suppliers. For the underlying mechanism of harm from horizontal foreclosure, the idea that the conduct “removes constraints on the abuse of market power” seems to capture the potential harmful effects more precisely than the existing language. The dominant firm is under no obligation to grow or maintain the prevailing competition in the industry. Nearly all legal actions (or inactions) by the dominant firm are meant to alter the strength of competition in its favor, but only those that facilitate the abuse of market power should be challenged. The reference to the abuse of market power also nests the potential harm arising from collusion or coordinated action.

7.2 Assessment

7.2.2.1 Conditional rebates on all purchases

Referring to paragraph 152, we agree that conditional rebates granted on all purchases after meeting the threshold may have a strong foreclosure effect. However, the proposed test of loyalty-enhancing effect may fail because it may be difficult to determine the “but-for” share (i.e., the share that would be purchased absent the exclusionary conduct) or it may be highly variable. If rivals do not capture all demand above the threshold, defendants will inevitably claim that the threshold is set below the amount that would otherwise be purchased and thus will not have a loyalty enhancing
effect (also see paragraph 163). If buyers are risk averse, if there are indivisibilities in buyer demand, or if there is uncertainty in the enforcement of the conditional rebates, then buyers may choose to purchase amounts above the threshold even if they would otherwise prefer to switch to a rival’s product (also see paragraph 160). In addition, if the conditional rebates limit sales opportunities to smaller rivals, they may deter investments in products or marketing that limit the ability of the rivals to compete effectively even for amounts above the threshold. If the Commission intends to diagnose foreclosure by comparing levels of threshold versus “but-for” purchases, we encourage it to use a benchmark that reflects markets that are completely free of all thresholds and conditional rebates.

Referring to paragraph 154, we agree that the “suction” effect provides a useful indicator of the strength of loyalty-enhancing and exclusionary effects. We also believe that the Commission should consider competition for individual units, in addition to “commercially viable” amounts, as relevant for the analysis of exclusionary conduct. Competition at the margin is strengthened by competitive pricing of incremental units, which is distorted especially on the last units purchased before the rebate threshold is reached. The limitations of the “commercially viable” test outlined in the example on page 46 can be shown by increasing the percentage rebate to 5% on all sales. In this case the effective price of the last 50,000 units falls to zero, and may fall below zero as the commercially viable share declines. In the limit, the effective price of incremental units may be negative, implying that the dominant firm pays its customers to accept units near the rebate threshold. In industries where rivals must grow or expand through small gains in share, this will have powerful exclusionary effects that seem to deserve consideration by the Commission.

Paragraph 154 suggests that, to the extent that a cost of production is relevant for exclusionary behavior, ATC provides the correct measure of cost. In general, the measure of costs should be the cost of production over the relevant time period of the alleged exclusionary conduct. Because the exclusionary behavior discussed in this section need not have a finite lifespan, the focus on total long-run costs of production seems justified. It would be useful to further clarify the components of the ATC. First, the relevant costs should include all economic opportunity costs, as distinguished from accounting formulations of costs used for other purposes. Second, in the case of joint production or multi-product firms with large fixed costs, cost attribution issues may render any cost test ineffective at identifying anticompetitive effects. If a dominant firm has either a relatively large number of products over which to allocate fixed costs, or a relatively large amount of fixed costs to allocate over a few products, then the cost allocation decision rather than the anticompetitive effect may determine the outcome of the cost test. In the case of multi-product firms or joint production, the cost test should not be considered dispositive. In such a case, an alternative test that balances the exclusionary effects with any pro-competitive effects should be considered.

Referring to paragraph 155, the proposed required share test is based on the as-efficient assumption that may permit conduct that removes desirable constraints on the abuse of market power. This assumption is incorporated into the formula by using the ATC of the dominant company. The resulting figures for the required share tend to be biased downward if one does not adjust properly for economies of scale. The
Commission seems to recognize that the test may provide inconclusive results and also introduces a commercially viable share benchmark. While this may mitigate our concerns about the as-efficient test, it does not remove the possible accounting difficulties of using ATC in the test in a multi-product environment (see our comments to paragraphs 64-66).

In paragraph 155, the Commission provides a required share test that is intuitively appealing. However, in multi-product environments, the required share test may be problematic. The required share test assumes that the list price is greater than the ATC, but if the list price is less than the ATC, the required share is negative. In the multi-product case, plausible cost attribution could result in ATC higher than prices for some products, even in highly competitive industries. The test, as written, cannot be applied literally, because the firm could never fail it if this condition holds. To the extent that the allocation of large fixed costs across multiple products is an issue for debate, the accounting issues exacerbate the difficulty in applying the test. A dominant firm could circumvent the cost test by attributing costs to products outside the scope of exclusionary allegations, for example, to products for which it has an uncontested monopoly. In an earlier section, the Commission suggests that pricing below ATC can be justifiable in some instances, indicating that this multiple product allocation issue is more than a theoretical concern.

Our concern with the required share test is that its theoretical simplicity (i.e., compare one value with another value and evaluate based on the results) might lead to false impressions. If a dominant firm can debate the terms underlying the test, it might be able to generate an outcome where it passes the test as applied. Ambiguity may arise if this non-failure could be seen as a safe harbor for the dominant firm. The concern is exacerbated by the fact that the Commission does not specify appropriate levels for the commercially viable share. That is, the theoretical test involves comparing one debatable number (a function of ATC) with an unknown number (the commercially viable share), and this uncertainty may lead to practical problems with applying the test.

As a general statement, we agree with the Commission’s focus on the specifics of the situation. In particular, footnote 101 in paragraph 155 demonstrates awareness that the rebate structure might be very different for different segments of customers. The Commission indicates that the different groups of customers will be evaluated separately. Given the level of detail that is required to evaluate rebates offered to particular customers (effectively knowing the contract terms for individual buyers), the focus on the required share might actually obscure the relevant issue, which is the effective price for goods produced for the contestable share of the market. It is possible that the required share test could be used as an initial test (perhaps using publicly available data), that provides one piece of evidence for deciding if an investigation should be opened. If deemed necessary, further investigations would focus on the details of contracts and pricing behavior.

Referring to paragraph 158, we agree that there are meaningful differences between standardized and customized volume thresholds, and that customized rebates targeting specific rivals are more likely to result in foreclosure. We also agree that the analysis of customized rebates should consider whether volume thresholds are set in absolute or percentage terms. For example, a percentage target may indeed be the most straightforward way to enhance loyalty, but it imposes higher monitoring costs than an
absolute threshold because it requires the dominant firm to verify the buyer’s purchases from itself and from all its rivals. The choice by the dominant firm to apply absolute or percentage thresholds may also reveal information about market conditions (e.g., absolute and percentage targets may be equivalent if demand can be easily forecast) and could reveal information relevant to evaluating a dominant firm’s efficiency claims.

7.2.3 Rebates in return for supply of a service by the buyer

We suspect that defendants will interpret paragraph 170 favorably, because many forms of exclusionary conduct include contractual provisions for some form of marketing or promotional service. For example, the payment of slotting fees and/or market development funds are often conditioned on volume targets set by suppliers, or simply provided at the discretion of the supplier, and therefore may have many of the same exclusionary effects as the conditional rebates discussed in this section. Such contracts may be used to induce efficient retailer services, or to complement the manufacturer’s monitoring efforts to ensure compliance with the contract. If the Commission intends to encourage these types of efficiencies, then it should consider them as a possible defense to be included in section 5.2.5.

7.2.4 Possible defenses: objective justification and efficiencies

We agree that it is extremely useful to provide examples of possible defenses based on efficiencies achieved by the exclusionary conduct. Cost savings, the avoidance of double marginalization, and the protection of relationship-specific investments are all desirable outcomes that should be protected. To these we would add the possible efficiencies in promotional services induced by the conduct, and also the long-run efficiencies in output planning and capacity building that may arise from shifting demand risk between supply-chain partners. In addition, the Commission may also want to include nonexclusionary alternatives for each category of efficiencies. For example, it is well known that a menu of two-part tariffs can be used by a dominant firm to avoid double marginalization without resorting to exclusionary conduct such as single branding or conditional rebates. When evaluating exclusionary conduct, the Commission should require defendants to appeal to (and quantify the expected magnitude of) the proposed efficiencies and to explain why the corresponding nonexclusionary alternatives have not been utilized.

The Commission may want to clarify the degree to which legitimate business purposes can be used as a defense, even if the overall effect is not efficiency enhancing. For example, a firm may justify the use of exclusionary conditional rebates as price discrimination, even in cases where there are no net efficiency gains, arguing that the firm is simply more effectively extracting surplus from its consumers or downstream partners.
8. Tying and Bundling

8.1 Introduction

Referring to paragraph 177 and 178, we agree with the Commission’s assessment of the practices of tying and bundling. Tying and bundling are often common practices, and efficiently combining two distinct products into one product is often desirable and would qualify as traditional competing on the merits. Attacking bundled products on competition grounds, especially in a high technology market, requires a clear understanding of how market power is properly measured in dynamic industries. Normal market power analysis remains as germane to dynamic industries as to classic commodities, save for the need to give due weight to the economic consequences of network effects and tipping.

In reference to paragraph 180, we agree that a dominant firm in the tying market has the potential to not only foreclose competition in the tied market, but further solidify its dominant position in the tying market. Software and hardware markets, due to their reliance on interoperability and layering (e.g., processor market and the operating system market), can be especially vulnerable to this dynamic. Moreover, these markets have historically seen attempts by firms to leverage market power in one product into a nascent product market. That conduct may not meet the elements of tying, but nonetheless carries a significant ability to increase or maintain the leveraging firm’s market share and warrants enforcement. Again, software markets, typified by the network effects phenomenon and being so reliant on interoperability, are particularly susceptible to this conduct. We suggest that the Commission expressly note that leveraging attempts in this space remains actionable even if it does not constitute a classic tying scenario.

8.2 Assessment

We recognize that many product-feature combinations are efficiency enhancing, especially in the absence of market power. The threat of product bundling lies of course in its ability to leverage established market power into adjacent markets, that is, the market for the tied product. In innovation-driven industries, competition law enforcement must be especially stringent in punishing leveraging, because a smaller degree of success can nonetheless have a significant and lasting effect on competition. However, modern competition law should not demand that bundling or tying as such must rise to the level of adjacent-market monopolization in order to warrant intervention. The economic force of network effects might make a tie successful at much lower penetration rates than what a viable monopolization claim requires.

For this reason, we emphasize that close attention should be paid to attempts to leverage market power into adjacent products even where a charge of monopolization or attempted monopolization in that adjacent product market would not be viable. Leveraging within high-tech industries is as successful, if not more so, in securing dominance in the leveraging firm’s core product market. We suggest that the
Commission should in these circumstances recognize such leveraging as classic monopoly maintenance conduct, as well as a possible attempt to monopolize the adjacent market.

### 8.2.4 Possible Defenses: Objective Justifications and Efficiencies

The true challenge of bundled products lies in defining the product market. In contrast to brick-and-mortar physical plants and commodities, high-tech products (e.g., computer code) are far more malleable and more easily combined without detection. In addition, these products may more easily spawn arguments that bundling is a technological necessity, or at the least is technologically dangerous to dismantle. Since the majority of computer code is proprietary and sufficiently impenetrable (often millions of lines long), it becomes difficult to argue on technicalities. This is another example of where an effects-based standard for exclusionary conduct would be superior.

### 9. Refusal to Supply

#### 9.2.2.6 Refusal to License Intellectual Property Rights

Referring to paragraph 238, we agree that there is no general obligation for an IPR holder to license the IPR. Where interfaces are protected by intellectual property rights, however, they are particularly susceptible to use for anticompetitive purposes. Because interoperability is essential to competition in high-technology industries, disputes concerning proprietary interfaces and interface specifications merit special consideration. We therefore fully support the Commission’s conclusion in paragraph 240 that refusal to license technology that is indispensable for follow-on competition is often abusive.

Unlike books or novels, which stand by themselves, computer applications and peripherals function only in conjunction with hardware and other software. For example, a word processor must work together with an operating system in order to perform its task; otherwise, it is a useless set of magnetic impulses. In an open system, proprietary control over interface specifications is not used to restrain interoperability. When a company exercises proprietary control over the interface specifications implemented by its products, however, that company can determine which products made by other firms – if any – may interoperate with its software or hardware. Should that company have a dominant position in a particular market, it could use its control over interoperability to expand its dominant position into adjacent markets.

Such control poses substantial risks to consumer welfare. Consumers would not receive the benefit of innovative products introduced by new entrants. In the absence of competition during the effective lifespan of the product, the first developer would have little incentive to develop more innovative and less costly products. These negative consequences would be compounded by the fact that the personal computer revolution
and the emergence of the Internet have produced an overwhelming need for interconnection between different elements of digital networks. Prohibiting competitors from accessing the *de facto* standard interface specifications would lock users into a particular operating system, software platform, or network software environment, and would inhibit the transfer of data between users with different computing environments. An appropriate antitrust framework should account for these considerations when analyzing refusals to license.

We also note that while the general ability to exclude is inherent to IPR, it should not be construed to deprive courts of first instance of their remedial discretion in adjudicating intellectual property rights disputes by mandating that IPR plaintiffs have a presumptive right to a particular form remedy.

### 10. Aftermarkets

#### 10.1 Introduction

When considering IPR on interfaces, the Commission should recognize the value of open systems, and appreciate the leverage that interfaces offer when the interface-controlling entity competes in aftermarkets. Referring to paragraph 243, we agree with the Commission’s prescient use of toner cartridges as an example. In the United States, we have witnessed a printer manufacturer using intellectual property law to suppress competition in the toner aftermarket. Specifically, the printer manufacturer invoked the U.S. Digital Millennium Copyright Act, enacted to comply with the WIPO Copyright Treaty’s mandate in Article 11 that signatories provide “adequate legal protection and effective legal remedies against the circumvention of effective technological measures” that protect copyrighted works from Internet piracy. The protection of technological protection measures, often referred to as paracopyright, is a related IPR.

#### 10.2.2 Dominance

Referring to paragraph 252, we agree that the supplier of the primary product may utilize proprietary rights to impede entry into the aftermarket. In the particular case noted above, the printer manufacturer designed a proprietary interface between its printer and the toner cartridge, which contained a copyright code. This proprietary interface prevented consumers from buying less expensive toner cartridges elsewhere. When a chip manufacturer designed a chip allowing other printer cartridges to interoperate with the printers, the lock-out code notwithstanding, the printer manufacturer brought a paracopyright action against the chip manufacturer in an effort to maintain its control over the aftermarket. Although an appellate court ultimately refused to allow paracopyright to be used in this manner, the printer manufacturer subsequently achieved a similar result through the use of restrictive licensing, which an appeals court upheld. In this way, the intellectual property right on the interface can lead to a prohibition against interoperability and monopolization of the aftermarket. In the printer case, monopolization had the potential to occur notwithstanding potential competition from
manufacturers who designed better or less expensive replacement parts like toner cartridges. The analysis of competition cases involving aftermarkets should therefore be designed to consider IPR affecting the interface between the primary market product and the secondary market product.

As paragraph 254 correctly observes, competition in the primary market does not protect customers who have already purchased in the primary market from subsequent changes in practice or policy. Thus, abuses may occur despite the presence of primary market competition.