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Comments to the Commission's Draft Horizontal Guidelines— Standardization

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I. INTRODUCTION

This brief paper sets out our comments on Section 7 of the Draft *Guidelines on the applicability of Article 101 of the TFEU to horizontal co-operation agreements* (“Draft Guidelines”) and, in particular, on the criteria for assessment of standardization agreements.

We have three main comments:

- First, technology owners participating in a standard-setting process compete to have their technologies selected into the standard. A standardization agreement is a horizontal cooperation agreement among users of the standard, which collectively select the technologies used in their products. It is not a horizontal cooperation agreement among technology owners. Therefore, any restriction imposed on the licensing terms offered by technology owners holding essential intellectual property rights (“IPR”) in a standard under the umbrella of Article 101 would be unjustified, as it would limit the ability of non-dominant IPR holders to set licensing terms on market terms.
- Second, the Draft Guidelines identify three sufficient conditions for a finding of no infringement of Article 101(1). A careful reading of the Draft Guidelines suggests that the very same conditions are necessary conditions for an exemption. It follows that under the rules set out in the Draft Guidelines no agreement that infringes Article 101(1) could be exempted under Article 101(3). We believe this is inconsistent with the rule of reason approach that characterizes the assessment of cooperation agreements under Article 101.
- Third, we believe the rules set out in the Draft Guidelines for the treatment of standardization agreements under Article 101 risk chilling innovation and, in some industries, also undermining the process of standardization. This is because those rules impose a compulsory licensing obligation on technology companies with essential IPR on the standard, which places a cap on their expected returns to investment.

II. A BRIEF OVERVIEW OF SECTION 7 OF THE DRAFT GUIDELINES

The Draft Guidelines identify as *restrictions of competition by object*: (a) those agreements that use a standard to exclude actual and potential competitors (¶ 266), (b) any efforts to fix prices by using the disclosure of essential IPR or most restrictive licensing terms prior to the adoption of the standard (¶ 267), and (c) agreements on the licensing terms to be disclosed by IPR holders prior to the adoption of the standard (¶ 267).

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All other standardization agreements may give rise to anticompetitive effects and thus may be considered as *restrictions by effect*. The Draft Guidelines set out the conditions in which standard-setting agreements fall outside the scope of Article 101(1) (¶ 277).

- 1) Participation in standard-setting and the procedure for adopting the standard must be unrestricted and transparent.
- 2) Standardization agreements should set no obligation to comply with the standard.
- 3) Standardization agreements should provide access to the standard on Fair, Reasonable, and Non-discriminatory (“FRAND”) terms.

These conditions are sufficient though not necessary conditions.² When these conditions are not fulfilled, companies involved in a standard-setting agreement have to assess whether the agreement falls under Article 101(1) (¶ 276).

An agreement that infringes Article 101(1) can nonetheless be exempted under Article 101(3). Importantly, the Draft Guidelines require that conditions 1 to 3 listed above be met for a valid efficiency defense under Article 101(3). Condition 1—transparency and unrestricted access—is required to show the efficiencies would materialize (¶ 301) and to prove the agreement is considered indispensable (¶ 307). Condition 2—voluntary participation—is required to satisfy the indispensability criterion (¶ 309). Access on FRAND terms—condition 3—is required to ensure that a standardization agreement does not afford the parties the possibilities of eliminating competition (¶ 314) and to guarantee that the interests of users of standards are protected ((¶ 311).

III. STANDARDIZATION AND HORIZONTAL COOPERATION

SSOs are multilateral bodies comprising users, technology owners (some of which will be IPR owners), and, in many occasions, government representatives and regulators. The members of an SSO select the technologies that will define a standard according to certain procedures and voting rules.

For users the standard setting process facilitates coordination on a superior technology. In the absence of a standardization agreement some users may select technologies that are pushed out of the market because some other technology becomes a *de facto* standard. Standardization eliminates that risk, which may foster price and innovation competition among users (i.e., in downstream markets).

The standard-setting process is seen very differently by technology owners.³ Technology owners compete to get their technologies selected by SSOs. They compete by advocating the merits of their technologies in absolute and relative terms to other SSO members. They need to attract greater support than their competitors when the various options come to a vote. Therefore, while a standardization agreement can be fairly characterized as a horizontal

² Strictly speaking the Draft Guidelines state that these conditions will be *normally* sufficient. As in all other sections of the Draft Guidelines, the Commission appears to be unwilling to provide absolute safe havens in regards to horizontal cooperation agreements. We believe that while this approach may reduce type II errors it also limits the value of the Guidelines from a deterrence viewpoint as it makes self-assessment more difficult and costly.

³ This is obviously the case for *pure* technology companies, which do not use the standard to compete in downstream markets. SSOs will often include vertically integrated (VI) companies that are both users of the standard and technological competitors. As technology owners, VI firms will compete with each other to have their technologies selected. So, the dichotomy established as part of our comments is robust to the inclusion of VI companies. We present our comments in terms of pure technology owners and pure users for expositional simplicity only.

cooperation agreement among users of the standard, we fail to see how it could be considered a horizontal cooperation agreement among technology owners. There is no horizontal cooperation agreement among technology owners because (a) their incentives are not aligned (each of them wants to see selected its own technology) and (b) their incentives are not aligned by the standard-setting process (some win while others lose).

This has an important implication for the assessment of standardization agreements under Article 101(1): Competition concerns in connection with the cooperative nature of standard-setting must relate to the impact of standardization on the strength of competition among users. For example, a standardization agreement which allows a group of users participating in the SSO to boycott and exclude competitors in downstream markets would clearly fall under Article 101(1). Likewise, an agreement which favors some technology owners over others is also likely to fall under Article 101(1), as the Draft Guidelines correctly state.

Requiring, as the Draft Guidelines do, that SSOs (a) guarantee that “all relevant actors can participate in the selection of the standard,” (b) have “objective and non-discriminatory procedures for allocating voting rights,” (c) do not “exclude or discriminate against specific groups of IPR holders,” and afford no “bias in favour or against royalty free standards,” and (d) adopt “procedures that allow stakeholders to inform themselves of upcoming, ongoing, and finalised standardisation work” makes perfect sense (¶ 278). All these requirements, which are related to conditions 1 and 2 above, ensure that users do not manipulate the standard-setting process to exclude competitors or to favor certain technologies over others.

However, imposing an obligation on SSOs to adopt rules that limit the royalty rates charged by technology owners with essential IPR, as the Draft Guidelines also requires (¶¶ 280 - 287), goes beyond the remit of Article 101(1). The Draft Guidelines extend the so-called “special responsibility” of dominant undertakings in connection with excessive pricing to non-dominant IPR holders by misunderstanding the nature and scope of standard-setting.

As explained above, technology owners do not cooperate within a standard-setting process; rather they compete with each other to have their technologies selected as part of the standard. They mainly do so by investing in developing the most attractive and appealing technological solutions. They may also compete by negotiating attractive commercial terms prior to the adoption of the standard. However, under the rules of all SSOs for which we have knowledge, such as ETSI or IEEE, the standard-setting process does not involve collective discussions of licensing fees or other commercial terms for technologies protected by IPR. Licensing terms are supposed to be negotiated bilaterally and thus competitively, before or after the adoption of the standard, but in any event outside SSOs.

IV. IMPOSSIBILITY OF AN EFFICIENCY DEFENCE UNDER ARTICLE 101(3)

As noted above, the Draft Guidelines have identified a set of three sufficient conditions for a standardization agreement not to fall under Article 101(1). In formal terms,

Conditions 1, 2 and 3 \Rightarrow *no infringement of Article 101(1)*. (1)

For a standardization agreement that falls under Article 101(1) to be exempted under Article 101(3), the participants in the agreement must be able to prove the efficiencies that would result from the agreement, the indispensability of the agreement, and the agreement’s benefits for consumers. They must also show that the agreement does not allow them to eliminate

competition. The Draft Guidelines state that an agreement that does not satisfy conditions 1, 2, and 3 cannot be exempted under Article 101(3). Formally,

$$\textit{Exemption Under Article 101(3)} \Rightarrow \textit{Conditions 1, 2 and 3.} \quad (2)$$

Equation (1) above implies

$$\textit{Infringement of Article 101(1)} \Rightarrow \textit{Conditions 1, 2 and 3 are not satisfied.} \quad (3)$$

Likewise, equation (2) implies

$$\textit{Conditions 1, 2 and 3 are not satisfied} \Rightarrow \textit{no exemptions under Article 101(3)} \quad (4)$$

But then, from equation (3) and (4), we have that

$$\textit{Infringement of Article 101(1)} \Rightarrow \textit{no exemptions under Article 101(3).}$$

In plain English, since conditions 1, 2, and 3 are sufficient conditions for a finding of no infringement and also necessary conditions for an exemption, whenever the Commission concludes that an agreement infringes Article 101(1) under the criteria laid out in the Draft Guidelines, it must also conclude that the agreement cannot be exempted under Article 101(3).⁴ Hence, under the Draft Guidelines standardization agreements will no longer benefit from an efficiency defense. They will no longer be analyzed using a rule of reason approach.

V. INNOVATION AND STANDARDIZATION INCENTIVES

We believe the rules set out in the Draft Guidelines for the assessment of standardization agreements under Article 101 risk chilling innovation and, in some industries, also undermining the process of standardization. We are concerned for two reasons. First, condition 3 above imposes a limit to the compensation received by IPR owners of essential technologies irrespective of whether or not they enjoy a dominant position.⁵ Second, standardization agreements where technology owners holding IPR do not commit to license them under a FRAND commitment interpreted consistently with the Draft Guidelines cannot be defended under Article 101(3), irrespective of their social benefits. In sum, we believe the Draft Guidelines impose a cap on the

⁴ Consider the following analogy. A driver moving at a speed below 100 Km/h in road X does not infringe the traffic laws. A driver who drives too fast is considered to infringe the traffic laws, unless he or she can provide a legitimate justification. A driver who drives too fast that seeks to be acquitted by providing a legitimate justification must show that he or she was driving at less than 100 Km/h. From these premises it follows that any driver moving at a speed above 100 Km/h in road X will be found guilty and his or her justifications will automatically be dismissed.

⁵ In fact, dominance is presumed in the Draft Guidelines, which is incorrect. While IPR create a legal monopoly over a period of time, they do not necessarily give rise to a dominant position because their scope (or breadth) may not span the entire relevant product market, other technological solutions may be seen as equivalent by consumers, and the IPR holder may be constrained by potential entrants/innovators, some of which may be sponsored by the users of his or her technologies.

remuneration of innovators participating in a standard-setting process by imposing a compulsory licensing obligation on them, which will adversely impact innovation.

Of course, the welfare consequences of a compulsory licensing obligation depend on the level of the royalty rates. The Draft Guidelines do not favor discrimination in favor of royalty free technologies. Rather, they point to royalty fees based on the “economic value” of the IPR, (¶ 284). The Draft Guidelines discuss three methods for assessing that “value.” All three methods face some very serious problems, however. This should not be surprising. As is well-known, the assessment of excessive pricing is subject to substantial conceptual and practical difficulties.⁶ This is especially true as regards IPR, given that, as recognized by the Draft Guidelines “cost-based methods are not well-adapted” (¶ 284), and a valuation based on comparisons of terms and conditions is extremely difficult because (a) IPR are inherently heterogeneous and (b) their true value depends on how, when, where, and by whom those rights will be utilized.⁷

The first method suggested by the Draft Guidelines (¶ 284) is to consider whether the terms and conditions applied once the standard has been adopted (*ex post*) with the terms and conditions that were applied before the standard was adopted (*ex ante*). That is, the Draft Guidelines suggest that licensing fees should be restricted to the value the patent adds as compared to licensees’ next best alternative *ex ante* to standard implementation. This is known as the “incremental value rule.”⁸

As noted by Layne-Farrar et al.,⁹ the incremental value rule relies on the presumption that all needed innovations have already been developed. From an *ex-ante* perspective, i.e. before either licensors or licensees have made any irreversible investments, they find that imposing an incremental value cap on licensing fees would lower R&D investment and innovation and would reduce the incentives for SSO participation among IPR holders when one of the following conditions hold: (a) investments are risky and involve significant sunk costs; (b) innovators are risk averse; or (c) innovators have the option to remain outside the standard-setting process and compete to make their technologies part of a de facto standard.

As an alternative, the Draft Guidelines propose to rely on “an independent expert assessment of the relevant IPR portfolio’s objective quality and centrality to the standard at issue” (¶ 285.) We believe this alternative is hopelessly subjective and open to potential manipulation. Furthermore, it is bound to yield incorrect predictions in numerous instances, given the inherent

⁶ See D. Evans & J. Padilla, *Excessive Prices: Using Economics to Define Administrable Legal Rules*, J. COMPETITION LAW & ECON. (2005).

⁷ In other words, it is difficult, if at all possible, to implement reliably the two limbs of the excessive pricing test set by the Court of Justice in *United Brands* in cases involving IPR. See R. O’Donoghue and J. Padilla, *The Law and Economics of Article 82*, Hart Publishing, 2006, chapter 12.

⁸ See D. G. Swanson and W. J. Baumol, “Reasonable and Nondiscriminatory (RAND) Royalties, Standards Selection, and Control of Market Power”, *Antitrust Law Journal*, 2005, and A. Layne-Farrar, J. Padilla, and R. Schmalensee, “Pricing Patents for Licensing in Standard Setting Organisations: Making Sense of FRAND Commitments”, *Antitrust Law Journal*, 2007. The incremental value is one of the 15 factors in *Georgia-Pacific* and, as such, has been part of reasonable royalty rate determination in the United States for a long time. (*Georgia-Pacific Corp. v. U.S. Plywood Corp.*, 318 F. Supp. 1116 (S.D.N.Y. 1970). The Draft Guidelines suggest that incremental value is not merely one of many determinants, but is instead the ruling one.

⁹ See A. Layne-Farrar, G. Llobet, & J. Padilla, *Increments and Incentives: The Dynamic Innovation Implications of Licensing Patents under an Incremental Value Rule* forthcoming in REGULATING INNOVATION, COMPETITION POLICY AND PATENT LAW UNDER UNCERTAINTY, (G. A. Manne & J. D. Wright, eds.) (2010). See also A. Layne-Farrar, G. Llobet, & J. Padilla, *Payments and Participation: The Incentives to Join Cooperative Standard Setting Efforts*, Working Paper, February 2010, available at <http://www.cemfi.es/~llobet/joinSSO.pdf>.

difficulty in assessing the “quality and centrality to the standard at issue” of an IPR portfolio. Finally, the Draft Guidelines do not explain how those assessments would translate into an economic valuation—an exercise that, as explained above, would be difficult for conceptual and practical reasons.¹⁰ The third possible method suggested in the Guidelines is to “rely on previous unilateral ex ante disclosures of most restrictive licensing terms” (§ 285). From an economic perspective this method has the same virtues and problems than the first method: it may lead to underinvestment and discourage standardization.

VI. CONCLUDING REMARKS

In this concluding section, we would like to raise one additional concern that has to do with the potential proliferation of inefficient regulations. As shown by Gal & Padilla,¹¹ antitrust rules in many jurisdictions often mimic the rules of jurisdictions with established antitrust regimes, especially those of the United States and the European Union. Due to this “follower phenomenon,” the proliferation of one's antitrust prohibitions can sometimes act as a boomerang, negatively affecting the welfare of the followed jurisdiction. The followed jurisdiction should therefore rationally anticipate the follower phenomenon and modify its choice of legal rules to account for the boomerang effect. The interventionist approach adopted in the Draft Guidelines may be copied by other jurisdictions, which may result in a cumulative adverse effect on the incentives to invest and innovate.

This is not just a theoretical concern. The Chinese government has issued draft “Provisions on the Administration of Formulating and Revising National Standards Involving Patents” which restricts the remuneration of patent patents on technologies which form part of “national standards.”¹²

¹⁰ See A. Layne-Farrar, J. Padilla & R. Schmalensee, op. cit. *supra* note **Error! Bookmark not defined..**

¹¹ M. Gal & J. Padilla, *The Follower Phenomenon: Implications for the Design Of Monopolization Rules In A Global Economy*, ANTITRUST L.J. (forthcoming 2010).

¹² Available at http://www.ipprospective.com/wp-content/uploads/2009/11/091118chinastandard_e1.pdf.