

**COMMENT OF THE GLOBAL ANTITRUST INSTITUTE,  
ANTONIN SCALIA LAW SCHOOL, GEORGE MASON UNIVERSITY,  
ON THE ANTI-MONOPOLY COMMISSION OF THE STATE COUNCIL’S  
ANTI-MONOPOLY GUIDELINES AGAINST ABUSE OF INTELLECTUAL  
PROPERTY RIGHTS**

April 13, 2017

This comment is submitted in response to the Anti-Monopoly Commission of the State Council’s Anti-Monopoly Guidelines on the Abuse of Intellectual Property Rights (Draft Guidelines). We appreciate the opportunity to comment and commend the State Council for its transparency. We submit this comment based upon our extensive experience and expertise in antitrust law and economics generally, and specifically with respect to the intersection of intellectual property and antitrust.<sup>1</sup>

**INTRODUCTION**

We commend the State Council for its general approach, as set forth in the Preamble and Chapter I on General Issues, of recognizing that the Anti-Monopoly Law (AML) “shall not apply to the conduct of undertakings to exercise their intellectual property rights [IPR] according to the laws and administrative regulations on IPRs,” and condemning as an AML violation only those acts that “have the effect of excluding or restricting competition.”

Overall, we have five main concerns with the Draft Guidelines.

First, the Draft Guidelines do not explicitly recognize an IPR holder’s core right to exclude. As discussed below in the section on the Economics of Innovation, the right to exclude is a central feature of IPRs, and economic theory and empirical evidence show that IPRs incentivize the creation of inventions, ideas, and original works. Relatedly, the Draft Guidelines do not incorporate throughout the well-accepted methodological principle that, when assessing the possible competitive effects of the use of IPRs, agencies should compare the competitive

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<sup>1</sup> The Global Antitrust Institute (GAI), a division of the Antonin Scalia Law School at George Mason University (Scalia Law), is a leading international platform for economic education and research that focuses upon the legal and economic analysis of key antitrust issues confronting competition agencies and courts around the world. University Professor Joshua D. Wright, Ph.D. (economics), is the Executive Director of the GAI and a former U.S. Federal Trade Commissioner. Koren W. Wong-Ervin is the Director of the GAI, and Adjunct Professor at Scalia Law, and former Counsel for Intellectual Property and International Antitrust at the U.S. Federal Trade Commission. Professor of Law Douglas H. Ginsburg is a Senior Judge, United States Court of Appeals for the District of Columbia Circuit, Chairman of the GAI’s International Board of Advisors, and a former Assistant Attorney General in charge of the Antitrust Division of the U.S. Department of Justice. Associate Dean for Research and Faculty Development and Professor of Law Bruce H. Kobayashi, Ph.D. (economics), is a GAI Senior Scholar and Founding Director.

effect of the IPR use against what would have happened in the “but for” world in which there is no license. This important analytical approach, which has been used by the U.S. antitrust agencies for the last 20 years, is absent from the Draft Guidelines. The U.S. approach is informative (and thus mentioned throughout this comment) in large part because the United States has a long history of trying to reconcile the two seemingly inconsistent bodies of law—antitrust and intellectual property—and there is much that can be learned from the mistakes made in the United States and our evolution away from presumptions of illegality to an effects-based approach that is consistent with economic theory and empirical evidence.

Second, the Draft Guidelines do not incorporate throughout the point that licensing is generally procompetitive. This modern economic understanding of licensing has informed the approach of the U.S. agencies, for example, for more than 20 years. The result is an approach that, with the exception of naked restraints such as price fixing, requires an effects-based analysis under which licensing restraints will be condemned only when any anticompetitive effects outweigh any procompetitive benefits.

Third, and relatedly, the Draft Guidelines appear to create a number of presumptions that certain conduct (such as charging for expired or invalid patents and prohibiting a licensee from challenging the validity of its IPR) will, or is likely to, eliminate or restrict competition. We respectfully urge the elimination of such presumptions and recommend that the State Council instead adopt an effects-based approach. This approach would benefit Chinese consumers because presumptions that are not appropriately calibrated are likely to capture conduct that is procompetitive, which is likely to have a chilling effect on potentially beneficial conduct. Adopting an approach that incorporates these revisions is likely to best serve competition and consumers, as well as China’s goal of becoming an innovation society.

Fourth, the Draft Guidelines appear to create special rules for conduct involving standard-essential patents (SEPs). We strongly urge the State Council to reconsider this approach. Instead, whether particular conduct involving SEPs, including evasion of a FRAND assurance, has net anticompetitive effects should require the same case-by-case, fact-specific analysis as is required for non-SEPs. Imposing special rules for SEPs, including creating presumptions of harm based on breach of contractual commitments such as a FRAND assurance, is not only unwarranted as a matter of competition policy, but also likely to deter participation in standard setting.

Lastly, we suggest the State Council adopt a more compliance-based approach that sets forth basic principles that would allow parties to self-advise. The Draft Guidelines instead set forth a list of factors that the AML agencies will consider when analyzing specific conduct, yet do not explain the significance of each of the factors or how they will be weighed in the AML agencies’ overall decision-making process. This approach allows the AML agencies broad discretion in enforcement decision-making without providing the guidance stakeholders need to protect incentives to innovate and transfer technology that could be subject to AML jurisdiction. To this end, we recommend that the State Council include throughout the Guidelines examples similar to those found in other guidelines, for example the U.S. antitrust agencies’ recently

updated 2017 *Antitrust Guidelines for the Licensing of Intellectual Property* and the Canadian Bureau of Competition's *Intellectual Property Enforcement Guidelines*, to illustrate how the AML agencies will apply the basic principles.

## THE ECONOMICS OF INNOVATION

Economic theory and empirical evidence show that IPRs—a central feature of which is the right to exclude—incite the creation of inventions, ideas, and original works.<sup>2</sup> They also facilitate the sale and licensing of intellectual property (IP) by defining the scope of property right protection and lowering transaction costs, and they produce incentives to develop alternative technologies as well as improvements and other derivative uses.

The incentive function of IP is illustrated by considering the sale of an invention in the absence of enforceable IPRs. The sale of an invention requires disclosure to the potential buyer. In the absence of enforceable IPRs, the potential buyer—now with knowledge of the invention—has no incentive to purchase or license the invention. This possibility deters the seller from disclosing the invention in the first place. Enforceable property rights solve this problem by allowing the seller to disclose the invention without fear that it will be lawfully appropriated without compensation. The inventor can anticipate the ability to appropriate the returns from investment in producing the invention, which serves as an incentive to invest in producing and to disclose the invention in the first place.

The economic literature also focuses on the related issue of the optimal tradeoff between these incentives and the ability to use the invention.<sup>3</sup> Inventions and works protected by IPRs are non-rivalrous, meaning one firm using a specific IPR does not diminish the ability of another firm to use the same IPR. Also, the cost of having another firm use an existing IPR is effectively zero. As a consequence, from a static welfare perspective, it is desirable to disseminate IPRs to every firm (or consumer) that has a positive valuation for the IPR. Of course, doing so would create a strong disincentive to innovate in the first place, to the great detriment of dynamic efficiency, which refers to the gains that result from entirely new ways of doing business. While static efficiency may increase consumer welfare in the short run, economics teaches us that dynamic efficiency, including societal gains from innovation, are an even greater driver of consumer welfare.<sup>4</sup>

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<sup>2</sup> See Bruce H. Kobayashi & Joshua D. Wright, *Intellectual Property and Standard Setting* in the ABA HANDBOOK ON THE ANTITRUST ASPECTS OF STANDARD SETTING 1, 2 (2010) [hereinafter Kobayashi & Wright] (citing William M. Landes & Richard A. Posner, *THE ECONOMIC STRUCTURE OF INTELLECTUAL PROPERTY LAW* (2003)); Henry E. Smith, *Intellectual Property as Property: Delineating Entitlements in Information*, 116 YALE L.J. 1742 (2007).

<sup>3</sup> Kobayashi & Wright, *supra* note 2.

<sup>4</sup> Robert Solow won the Nobel Prize in economics for demonstrating that gains in wealth are due primarily to innovation—not to marginal improvements in the efficiency of what already exists. See Press Release (Oct. 21, 1987), [http://www.nobelprize.org/nobel\\_prizes/economic-](http://www.nobelprize.org/nobel_prizes/economic-)

After the investments and competitive effort required to spur breakthrough inventions have been made and proven successful, it can be tempting to carve up the benefits and distribute them throughout the economy. Doing so, however, would harm competition, innovation, and consumers. If the government is too willing to step in and appropriate the gains from innovation and dynamic competition, then potential innovators anticipating such interventions will have weak incentives to risk investment in new inventions. Likewise, if the laws governing abuse of IPRs is uncertain or unpredictable, potential innovators will also have weak incentives to innovate. Our specific recommendations below attempt to identify those specific provisions that are unclear, counterproductive, or do not strike a balance between encouraging the use of existing innovations through the AML and the incentives for investment in new innovation.

## RECOMMENDATIONS ON SPECIFIC PROVISIONS

### Chapter II: Monopoly Agreements Involving IPR

#### Article 8 – Exclusive Grantback License

We respectfully urge that this provision be revised to explicitly recognize that exclusive grantbacks may be procompetitive and that AML agencies will analyze them under an effects-based approach in which licensing restraints are condemned only when any anticompetitive harm they may cause outweighs any procompetitive benefits they create.

Grantbacks, including exclusive grantbacks, may provide substantial procompetitive benefits because they may facilitate the integration of complementary technologies and provide incentives both for innovation in the first place and for subsequent licensing of the results of that innovation.<sup>5</sup> Grantbacks also provide a means for the licensee and the licensor to share risks and to reward the licensor for possible further innovations based upon or informed by the licensed technology.<sup>6</sup>

By way of example, the U.S. approach to both exclusive and non-exclusive grantbacks recognizes the existence of these substantial procompetitive benefits. While the U.S. antitrust agencies recognize that non-exclusive grantbacks are “less likely to have anticompetitive effects,” they nevertheless analyze both exclusive and non-exclusive grantbacks under the “rule of reason,” which is an effects-based approach. As such, “[i]f the Agencies determine that a particular grantback provision is likely to reduce significantly licensees’ incentives to invest in improving the licensed technology, the Agencies will consider the extent to which the grantback provision has offsetting procompetitive effects,” such as (1) increasing licensors’ incentives to

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[sciences/laureates/1987/press.html](https://www.fda.gov/sciences/laureates/1987/press.html).

<sup>5</sup> See, e.g., DEP’T OF JUSTICE & FED. TRADE COMM’N., ANTITRUST GUIDELINES FOR THE LICENSING OF INTELLECTUAL PROPERTY §§ 5.5, 5.6 (1995), <http://www.justice.gov/atr/public/guidelines/0558.pdf> [hereinafter DOJ-FTC IP GUIDELINES].

<sup>6</sup> See *id.* § 5.6.

innovate in the first place, (2) promoting dissemination of the licensee’s improvements to the licensed technology, (3) increasing the licensors’ incentives to disseminate the licensed technology, or (4) otherwise increasing competition and output in a relevant technology or innovation market.<sup>7</sup>

#### Article 10 – Standard-Setting

We respectfully urge that Article 10, which would create AML liability for joint conduct by competitors in the standard-setting process, be omitted in its entirety.

It is important to recognize that most, if not all industry standards, are established through consensus-based collaboration, including by technology owners and implementers, which may be actual and potential competitors. In addition, standards can create enormous value for consumers and industry, especially “in markets where compatibility and interoperability with other products is essential.”<sup>8</sup> And in many cases, this process requires the choice of one approach to the exclusion of others. We urge the State Council to recognize the substantial procompetitive benefits from the standard setting process, including those that exclude other competitive standards.<sup>9</sup>

Furthermore, as the European Commission has recognized, “[i]f participation in the standard-setting process is open in the sense that it allows all competitors (and/or stakeholders) in the market affected by the standard to take part in choosing and elaborating the standard, this will lower the risks of a likely restrictive effect on competition by not excluding certain companies from the ability to influence the choice and elaboration of the standard.”<sup>10</sup>

### **Chapter III: IPR-related Abuse of Dominant Market Position**

#### Article 13 – IPR and the Determination of Dominant Market Position

We commend the State Council for recognizing that IPRs, including SEPs, do not necessarily confer market power. We respectfully urge that this provision be revised to specify that the analysis will focus on the ability of the IPR holder to profitably maintain prices above or

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<sup>7</sup> *Id.*

<sup>8</sup> EUROPEAN COMMISSION, GUIDELINES ON THE APPLICABILITY OF ARTICLE 101 OF THE TREATY ON THE FUNCTIONING OF THE EUROPEAN UNION TO HORIZONTAL CO-OPERATION AGREEMENTS ¶¶ 257, 308 (2011) [hereinafter EU HCG].

<sup>9</sup> See, e.g., Kobayashi & Wright, *supra* note 2, at 40; see Joanna Tsai & Joshua D. Wright, *Standard Setting, Intellectual Property Rights, and the Role of Antitrust in Regulating Incomplete Contracts*, 80 ANTITRUST L.J. 157, 170 (2015).

<sup>10</sup> EU HCG at ¶ 295; see also *Allied Tube & Conduit Corp. v. Indian Head, Inc.*, 486 U.S. 492, 509 (1988) (endorsing SDO rules that establish “safeguards sufficient to prevent the standard-setting process from being biased by members with economic interests in restraining competition”).

output below competitive levels for a significant period of time, and the existence of actual or potential close substitutes that prevent the exercise of market power.

We strongly urge the State Council to recognize expressly that there is very little empirical basis upon which to presume any systematic relationship between market structure, competition, and innovation. While there is credible evidence that market incentives matter,<sup>11</sup> the empirical literature attempting to link market structure—typically measured by the number of firms or market shares in broadly defined markets—and product market competition to innovation are based on cross-section analyses that do not support a causal inference<sup>12</sup> and as a whole yield inconclusive results.<sup>13</sup> While competition certainly can stimulate innovation, economic analysis provides no reason to believe innovation ordinarily will come from within a “market” as defined for the purpose of antitrust analysis; hence there is little reason to believe proxies for dynamic competition will be positively correlated with innovative activity observed in such a market. Richard Gilbert’s careful examination of the empirical record reaffirms that the existing body of theoretical and empirical literature on the relationship between competition and innovation supports neither “the Schumpeterian hypothesis that monopoly promotes either investment in R&D or the output of innovation” nor “a strong conclusion that competition is uniformly a stimulus to innovation.”<sup>14</sup> In other words, market structure, as presently defined by reference primarily to market shares and ease of entry, provides at best a very crude signal of the likely impact a merger or single-firm conduct will have upon future competition.

With respect to SEPs in particular, we respectfully recommend that Article 13 be revised to consider (1) whether declared patents are truly essential, and (2) the degree to which any market power is mitigated by complementarities among technologies used for the same product.

First, SEPs are self-declared by standard-development organization (SDO) participants yet no SDO independently evaluates essentiality, which itself may change over time as the

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<sup>11</sup> See generally Eric Budish et al., *Do Firms Underinvest in Long-term Research? Evidence from Cancer Clinical Trials*, 105 AM. ECON. REV. 2044 (2015) (concluding that patient groups with longer commercialization lags tend to have lower levels of R&D investment); Daron Acemoglu & Joshua Linn, *Market Size in Innovation: Theory and Evidence from the Pharmaceutical Industry*, 119 AM. ECON. REV. 1049 (2004) (linking innovation rates to current and future market size).

<sup>12</sup> See, e.g., Philippe Aghion et al., *Competition and Innovation: An Inverted U-Relationship*, 120 Q.J. ECON. 701 (2005).

<sup>13</sup> See, e.g., Richard J. Gilbert, *Looking for Mr. Schumpeter: Where Are We in the Competition–Innovation Debate?*, in 6 INNOVATION POLICY AND THE ECONOMY 159, 164 (Adam B. Jaffe et al. eds., 2006) (“The many different predictions of theoretical models of R&D lead some to conclude that there is no coherent theory of the relationship between competition and investment in innovation.”); Joshua D. Wright & Douglas H. Ginsburg, *Dynamic Analysis and the Limits of Antitrust Institutions*, 78 ANTITRUST L.J. 1, 4-5 (2012).

<sup>14</sup> Richard J. Gilbert, *Competition and Innovation*, in 1 ABA SECTION OF ANTITRUST LAW, ISSUES IN COMPETITION LAW AND POLICY 577, 600 (W. Dale Collins ed., 2008).

standard continues through development and as new generations are issued.<sup>15</sup> Until an independent legal and technical review<sup>16</sup> establishes that a particular patent declared “essential” is in fact essential for compliance with the standard, there should be no presumption that an SEP confers market power.<sup>17</sup>

Indeed, there is an over-declaration problem stemming from two market forces. First, SDOs commonly permit members to make blanket declarations; i.e., a patent holder may promise to license on certain terms, such as FRAND terms, any and all patents that *may be* essential, without identifying any particular patents as being *actually* essential. SDO members over-declare their patents as SEPs in order to protect against allegations that they are engaging in a “patent ambush” when they later seek royalties for their patents.<sup>18</sup>

Second, even restricting the analysis to truly essential patents, one cannot perfunctorily conclude that an individual SEP or a portfolio of SEPs constitutes a well-defined relevant market or that the owner possesses market power.<sup>19</sup> Genuinely essential patents are perfect complements (i.e., like nuts and bolts), which creates a connection among patents and patent holders such that SEPs cannot be licensed in isolation, i.e., without an SEP holder considering the rates charged by other SEP holders for the same standard.<sup>20</sup> This is in part because all involved parties, including SEP holders, need a standard to be widely adopted in order to make a return on their investment. In particular, as U.S. courts have held, FRAND royalty rates are tied to the value the patented technologies contribute to the standard, which inherently accounts for all valuable contributions to the standard.<sup>21</sup> In addition, because licensees know they must license multiple SEPs to be compliant with a given standard, licensees tend to push back in negotiations if they think an SEP holder is attempting to ask for more than its share. Thus, in contrast to a monopolist, which can set prices without considering the reaction of other firms, an

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<sup>15</sup> Anne Layne-Farrar and Michael Salinger, *The Policy Implications of Licensing Standard Essential FRAND-Committed Patents in Bundles* at 7 (July 2016), [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2846147](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2846147).

<sup>16</sup> Typically, only conducted during litigation or if the patent is submitted for inclusion in a patent pool.

<sup>17</sup> Anne Layne-Farrar & Koren W. Wong-Ervin, *Standard-Essential Patents and Market Power* at 2 (November 2016), [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2872172](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2872172).

<sup>18</sup> Koren Wong-Ervin et al., *A Comparative and Economic Analysis of the U.S. FTC’s Complaint and the Korea FTC’s Decision Against Qualcomm* at 3 (April 2017), [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2947306](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2947306).

<sup>19</sup> Layne-Farrar & Salinger, *supra* note 15, at 7.

<sup>20</sup> Layne-Farrar & Wong-Ervin, *supra* note 17, at 2.

<sup>21</sup> *See* Ericsson, Inc. v. D-Link Systems, Inc., 773 F.3d 1201 (Fed. Cir. 2014); *see also generally* Huawei Jishu Youxian Gongsi Su Jiaohu Shuzi Tongxin Youxian Gongsi An (华为技术有限公司诉交互数字通信有限公司案) [Huawei v. InterDigital], 2013 Yue Gao Fa Min San Zhong Zi No. 306, (Guangdong High People’s Ct. 2013) (China).

SEP holder cannot act unilaterally and must take into account the value of other SEPs when setting its royalty rates.<sup>22</sup>

#### Article 14 – Licensing IPRs at Unfairly High Prices

Article 14 provides that “[u]ndertakings who have dominant positions may abuse their dominant position and license IPRs at unfairly high prices, excluding or restricting competition.” For the following reasons, we respectfully urge that this provision be omitted in its entirety.

There are many dangers to regulating price, particularly for IPRs. For example, requiring by law that prices be “fair” or “reasonable,” or prohibiting a firm from charging “unfairly high” prices risks punishing vigorous competition. In general, competition policy should not prohibit a monopolist from charging whatever price for its products, including its IPRs, it believes will maximize its profits. It is axiomatic in economics and in antitrust law that the “charging of monopoly prices . . . is . . . what attracts ‘business acumen’ in the first place; it induces risk taking that produces innovation and economic growth.”<sup>23</sup> This is particularly important in the case of IPRs; the very purpose for which nations create and protect IPRs is to induce investment in risky and costly research and development. To achieve a balance between innovation and the protection of competition, competition agencies should generally avoid imposing unfairly high pricing prohibitions, particularly in the IPRs context. Instead, monopoly prices should be considered only if they are the result of an independent competition law violation.<sup>24</sup>

In addition, economics teaches that, absent information about actual market transactions, it can be especially difficult to identify a “fair” price. Indeed, it is particularly difficult to assess the “fairness” of prices associated with licensing IPRs both because there is no marginal cost to which the price may be compared, and because IPRs themselves are highly differentiated products making price comparisons among them difficult, if not impossible. The risk of placing overly strict limitations on IPR prices is that the return to innovative behavior is reduced, and consumers suffer in the form of less innovation. Compounding the problem, with such limits in place, IPR holders will face significant uncertainty in determining whether their licensing practices violate competition laws, and legal uncertainty is the enemy of financial investment.

Finally, in order to determine whether a particular price is excessive, the competition agency would need to calculate a baseline price against which to compare the allegedly excessive price. In our experience, competition agencies will not possess the requisite information

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<sup>22</sup> Layne-Farrar & Wong-Ervin, *supra* note 17, at 2.

<sup>23</sup> Verizon Commc’ns Inc. v. Law Offices of Curtis V. Trinko, LLP, 540 U.S. 398, 407 (2004); *see also* JOSEPH A. SCHUMPETER, CAPITALISM, SOCIALISM, AND DEMOCRACY 89-90 (George Allen & Unwin 1976).

<sup>24</sup> Douglas H. Ginsburg et al., *Excessive Royalty’ Prohibitions and the Dangers of Punishing Vigorous Competition and Harming Incentives to Innovate*, CPI ANTITRUST CHRON. (March 2016), <https://ssrn.com/abstract=2748252>.



necessary to determine market prices generally, and royalty rates for inventions in particular. This is a task that is best left to the market or, as a last resort, to the courts in those limited cases when the parties cannot reach agreement.<sup>25</sup>

However, should the State Council decide to retain this provision—which we strongly urge be dropped—we respectfully request that it incorporate the following revisions, focusing primarily upon the prices of comparable licenses, which are the best available evidence of the market value of a patent:

The following factors may be considered in analyzing and determining whether an undertaking abuses its dominant market position:

- (i) Calculating methods of royalties and IPRs contributions to the value of relevant commodities; and
- (ii) ~~The IPRs licensing commitments made by the undertaking;~~
- (iii) The licensing history of IPRs or the rates of comparable licensing fees;~~;~~
- (iv) ~~Licensing conditions which lead to unfair prices, including restrictions on geographical or product scope of the licensing; and~~
- (v) ~~Whether the undertaking charges licensing fees on expired or invalid IPRs in package licensing.~~

In analyzing whether an undertaking licenses SEPs at unfairly high prices, the overall actual licensing fees borne by the products that meet relevant standards ~~and the impact thereof on the normal development of relevant industries~~ may also be considered where the cumulative royalty is so high as to cripple the product market or, at the very least, to substantially reduce output.

Factor 2 concerns contract issues that are not relevant to whether a particular price eliminates or restricts competition and, as such, should be omitted.

With respect to factor 3, comparable licenses may be the best available evidence of the market value of the patent. When considering comparable licenses, it is important to consider factors such as the circumstances, timing, and relative bargaining position of the parties to those licenses. For example, a license entered when the commercial viability of the technology is

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<sup>25</sup> For a discussion of the difficulties of court-determined rate setting, see Anne Layne-Farrar & Koren W. Wong-Ervin, *Methodologies For Calculating FRAND Damages*, LAW360 (Oct. 8-10, 2014), [https://www.ftc.gov/system/files/attachments/key-speeches-presentations/wong-erwin\\_-\\_methodologies\\_for\\_calculating\\_frand\\_damages.pdf](https://www.ftc.gov/system/files/attachments/key-speeches-presentations/wong-erwin_-_methodologies_for_calculating_frand_damages.pdf).

uncertain will, in general, result in a lower royalty than a license entered into when the commercial viability of the technology is established or has increased.

With respect to factor 4, proxies such as restrictions on geographical or product scope are generally poor indicators of whether a given royalty is “unfairly high.” Instead, should the State Council retain Article 14, it should focus primarily on comparable licenses.

With respect to factor 5 (charging a royalty based on expired patents in a portfolio), it would be impractical, if not impossible, for portfolio owners to constantly renegotiate licenses (or provide updated patent lists) every time an IPR in a licensed portfolio expires or, conversely, every time new IPR is added to the portfolio, both of which may occur frequently. Portfolios include patents with a variety of expiration dates—often with new patents being added regularly—and the parties to the license take the variety of expiration dates into account when negotiating a price. Indeed, we have found that portfolio licenses in which individual patents have a variety of expiration dates are common industry practice that reduces transactions costs and facilitates licensing.

Similarly, with respect to charging a royalty based on invalid patents, when a licensor and a licensee negotiate a license for a large portfolio, both parties understand that some of the hundreds or thousands of patents in the portfolio may be invalid. The parties do not invest extensive resources in identifying those invalid patents, which would make the transaction prohibitively costly. Instead, the parties avoid these transactions costs and assess generally the value of the licensed portfolio and determine a royalty that accounts for the possibility that some of the patents may be invalid.

With respect to royalty stacking, the aggregate royalty should be considered, if at all, only when there is evidence that it would have a severely adverse effect upon the product market, or at a minimum substantially restrict output. Some claim that royalty stacking concerns arise with respect to devices like mobile phones, which implement thousands of patents. The evidence, however, is not consistent with these speculative claims. For example, a recent empirical study shows that, contrary to the predictions of the royalty stacking theory, between 1994 and 2013, the non-quality adjusted average selling price of a mobile device fell 8.1% per year on average; the number of devices sold each year rose 62 times or 20.1% per year on average; the number of device manufactures grew from one in 1994 to 43 in 2003; and since 2001, concentration fell consistently and the average gross margin of SEP holders remained constant.<sup>26</sup>

To determine whether a particular aggregate royalty is excessive, it is essential to gather evidence of the actual cumulative royalty paid by a particular implementer (or set of

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<sup>26</sup> Alexander Galetovic & Kirti Gupta, *Royalty Stacking and Standard Essential Patents: Theory and Evidence from the World Mobile Wireless Industry* (Stanford Univ. Hoover Institution Working Grp. on Intellectual Property, Innovation, and Prosperity, Working Paper Series No. 15012, 2015), <http://hooverip2.org/wp-content/uploads/ip2-wp15012-paper.pdf>.

implementers).<sup>27</sup> The U.S. Court of Appeals for the Federal Circuit, in *Ericsson v. D-Link*, rejected the approach taken by some U.S. district courts of considering the aggregate royalties that would apply if one assumed that all SEP holders charged the same or similar rates. The problem with that approach is that not all patents are created equal and FRAND rates should reflect the value of the particular SEPs at issue. Thus, it does not make sense to assume that all SEP holders would charge the same or similar rate as the one at issue in a given investigation. In addition, many licensees do not pay cash royalties for every SEP. Instead, there may be cross-licenses or other business relationships that allow for royalty-free exploitation of some SEPs.

It is also critical to distinguish between the number of SEPs and the number of SEP holders. Given the prevalence of portfolio licensing, it is the number of SEP holders and not the number of SEPs that is relevant. Even if a license to 1,000 SEPs were required to implement a given standard, if all of those SEPs were held by a single entity that licensed on a portfolio basis, there would be no stack at all.<sup>28</sup> Moreover, for a variety of reasons, not all SEP holders seek license payments. As the U.S. Court of Appeals for the Federal Circuit stated in *Ericsson v. D-Link*, “[t]he mere fact that thousands of patents are declared to be essential to a standard does not mean that a standard-compliant company will necessarily have to pay a royalty to each SEP holder.”<sup>29</sup>

Lastly, one of the assumptions underlying the Cournot complements problem (upon which the royalty stacking theory is based) is that each input supplier will price its inputs without regard to the price charged for other needed inputs.<sup>30</sup> But there is no reason to assume that will necessarily be an equilibrium outcome in standard-setting contexts. For example, SEP holders will be cooperating with one another (and all other SDO members) in the development of the standard, and are thus likely to know what patents are expected to be asserted and by whom. As a result, there is no reason to presume that SEP holders will set rates without regard to the full complement of known SEPs. In addition, individual SEP holders will have strong incentives to cooperate in order to solve any potential royalty stacking/Cournot complements issue. Moreover, to the extent such cooperation solves a Cournot complements problem, the effect of such cooperation will be to increase profits while simultaneously increasing output and lowering

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<sup>27</sup> *Ericsson v. D-Link*, 773 F.3d 1201, 1234 (Fed. Cir. 2014) (holding that the burden is on the implementer (or, the one asserting a royalty-stacking problem) to provide evidence establishing the actual cumulative royalty, and that royalty must be evaluated to determine whether it is excessive).

<sup>28</sup> Anne Layne-Farrar & Koren W. Wong-Ervin, *An Analysis of the Federal Circuit’s Decision in Ericsson v. D-Link* 6-7, CPI ANTITRUST CHRON. (Mar. 2015), <http://www.crai.com/sites/default/files/publications/An-Analysis-of-the-Federal-Circuits-Decision-in-Ericsson-v-D-Link.pdf>.

<sup>29</sup> 773 F.3d at 1234.

<sup>30</sup> Augustin Cournot, *Researches into the Mathematical Principles of the Theory of Wealth* 99-116 (Nathaniel T. Bacon trans., Augustus M. Kelley Publishers 1971) (1838); see also Bruce H. Kobayashi, *Does Economics Provide a Reliable Guide to Regulating Commodity Bundling by Firms? A Survey of the Economic Literature*, 1 J. Comp. L. & Econ 707, 714 (2005) [hereinafter Kobayashi].

prices.

### Article 15 – Refusal to License IPRs

Article 15 governs refusals to license. We commend the State Council for recognizing that the “[t]he refusal to license is one form of exercise of IPRs by undertakings,” and strongly urge that this be revised to recognize that a refusal to license is a legitimate exercise of IPRs and will generally be permitted under the AML. This is consistent with the economic theory of IPRs set out above and the approach taken by the U.S. antitrust agencies, which have stated that “[a]ntitrust liability for mere unilateral, unconditional refusals to license will not play a meaningful part” in their enforcement efforts.<sup>31</sup> This approach recognizes that antitrust liability for refusals to license would impair an IPR holder’s core right to exclude, which is likely to lessen the incentive to innovate. In addition, “liability for refusals to license competitors would compel firms to reach out and affirmatively assist their rival, a result that is ‘in some tension with the underlying purpose of antitrust law.’”<sup>32</sup>

Article 15 would impose possible AML liability for an IPR holder’s failure to license an IPR that constitutes an “essential facility.” For the reasons set forth below, we respectfully urge that this language be omitted in its entirety or, at the very least, be revised to eliminate any presumption of illegality in favor of an effects-based approach.

First, although a firm’s competitors may desire to use a particular technology in their own products, there are few situations, if any, in which access to a particular IPR is necessary to compete in a market. Indeed, those who advocate forced sharing of an “essential” facility often have underestimated the ability of a determined rival to compete around the facility, with resulting benefits to consumers. This is particularly true with respect to fast moving technologies, where technological and market developments can present multiple opportunities to work around a competitor’s IP, and it is easier to work around an IPR than it is to work around a physical structure. Recognizing this, the U.S. Supreme Court has made it clear that it will treat so-called “essential facilities” claims with great skepticism, stating that courts should be very cautious in recognizing exceptions to the general rule that even monopolists may choose with whom they deal.<sup>33</sup>

Second, potential inventors may be less likely to undertake the research and development that lead to an invention if the inventor’s reward for its efforts is reduced by having to share its patent.<sup>34</sup> Conversely, if businesses know they can easily gain access to the patents of other

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<sup>31</sup> DEP’T OF JUSTICE & FED. TRADE COMM’N., *Antitrust Enforcement and Intellectual Property Rights: Promoting Competition and Innovation* at 6 (April 2007), <http://www.ftc.gov/reports/innovation/P040101PromotingInnovationandCompetitionrpt0704.pdf>.

<sup>32</sup> *Id.* (quoting *Trinko*, 540 U.S. at 407-08 (2004) (setting forth three sources of that tension)).

<sup>33</sup> *See Trinko*, 540 U.S. at 408.

<sup>34</sup> *See, e.g., id.*; Sidak, J. Gregory, *How Does the Experience of U.S. Telecommunications Regulation*

firms, then they have less incentive to innovate and more incentive instead to free-ride on the risky and expensive research of others.<sup>35</sup> The implication of this analysis is that requiring businesses to grant licenses to competitors wishing to use a patented invention is likely to result in less innovation, which will harm consumers in the long run.

Lastly, should the State Council retain this provision, we urge that it at least be revised to explicitly acknowledge that a patentee's ability to license may be limited because the patent has been or may be exhausted. Under the patent exhaustion doctrine, once there has been an authorized sale of a patented item, that sale "confers on the purchaser, or any subsequent owner, 'the right to use [or] sell' the thing as he sees fit."<sup>36</sup> Patent exhaustion eliminates the legal restrictions on what authorized acquirers "can do with an article embodying or containing an invention" whose initial sale (or comparable transfer) the patentee authorized.<sup>37</sup> Given the patent exhaustion doctrine, the licensor may choose not to license its IPR to certain persons or at certain levels of the distribution chain.

#### Article 16 – IPR-Related Tying

We commend the State Council for providing that when analyzing whether tying involving IPRs constitutes an abuse of market dominant position, "the factors considered will be generally the same as analyzing tying of other commodities." We respectfully urge that this provision be revised to state that the AML agencies will analyze tying under an effects-based approach in which licensing restraints are condemned only when any anticompetitive harm they cause outweighs any procompetitive benefits they create.

Tying and bundling, like other licensing restraints, are generally procompetitive because they may facilitate the integration of complementary technologies, promote the dissemination of a technology, and reduce transaction costs.<sup>38</sup> Bundling, for example, may be efficiency enhancing when multiple licenses are needed to use a single item of IP. Economic analyses of tying and bundling have pointed out the plausible and ubiquitous procompetitive uses of such licensing restraints.<sup>39</sup> Because of these procompetitive uses, the U.S. antitrust agencies have

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*Inform the Forced Sharing of Intellectual Property Rights under Global Competition Law?* (May 17, 2012), <https://ssrn.com/abstract=2061895>.

<sup>35</sup> See *Trinko*, 540 U.S. at 408.

<sup>36</sup> *Bowman v. Monsanto Co.*, 133 S. Ct. 1761, 1766 (2013) (quoting *United States v. Univis Lens Co.*, 316 U.S. 241, 249-50 (1942)).

<sup>37</sup> *Bowman*, 133 S. Ct. at 1766 & n.2.

<sup>38</sup> See, e.g., DOJ-FTC IP GUIDELINES, *supra* note 5, §§5.5 and 5.6.

<sup>39</sup> See, e.g., Alden F. Abbott & Joshua D. Wright, *Antitrust Analysis of Tying Arrangements and Exclusive Dealing*, in 4 ENCYCLOPEDIA OF LAW AND ECONOMICS: ANTITRUST LAW AND ECONOMICS 183, 189-190 (Keith N. Hylton ed., 2d ed. 2010) (citing David Evans & Michael Salinger, *Why Do Firms Bundle and Tie? Evidence from Competitive Markets and Implications for Tying Law*, 22 YALE J. ON REG. 37 (2005)); see also generally Anne Layne-Farrar & Michael A. Salinger, *Bundling of RAND-Committed*

stated that, “[i]n the exercise of their prosecutorial discretion, [they] will consider both the anticompetitive effects and the efficiencies attributable to a tie-in.”<sup>40</sup> The U.S. antitrust agencies use the same effects-based approach to evaluate bundled and package sales.

With respect to bundling, it is important to distinguish between pure and mixed bundling. Pure bundling occurs when a firm offers only the package and not the stand-alone goods. Mixed bundling occurs when both the package and the individual goods are available from the bundling firm. If the seller offers the goods separately from the bundle, then there is no coercion and a reduced risk of anticompetitive harms. With both pure and mixed bundling, given the numerous potential procompetitive benefits of package licensing, one cannot presume anticompetitive effects.

Bundling, including pure bundling, is not only widespread in practice, but also prevalent in markets in which no firm has significant market power. In competitive markets, “the presumptive explanation for bundling” is either economies of scope in production or reductions in transactions and information costs, which benefit the seller, the buyer, or both.<sup>41</sup> Offering consumers more choices can be costly for firms; if the costs of providing more choice exceed the benefits to consumers, more choice can make consumers worse off. For example, for a company with 1,000 patents, the number of possible licensing combinations of patents is on the order of  $10^{301}$ .<sup>42</sup> Thus, there is a significant cost of prohibiting bundling, including the significant (if not cost-prohibitive) transaction costs to both patent owners and implementers if they were forced to analyze each and every patent in a large portfolio and negotiate a license on each.

These procompetitive uses also apply when used by firms with significant market power. In that setting, however, bundling has the potential to harm competition and generate anticompetitive effects. Market power is a necessary but not sufficient condition for harm to competition. Without power in one of the goods included in the bundle, the seller would not be able to force the buyer to purchase its bundle because the buyer could easily purchase the bundled goods separately from other sellers. Even then, as the U.S. Supreme Court has explained, that “a purchaser is ‘forced’ to buy a product he would not have otherwise bought even from another seller” does not imply an “adverse impact on competition.”<sup>43</sup> Rather, for bundling to harm competition there would have to be an exclusionary effect on other sellers as a result of buyers’ thwarted desire to purchase an item in the bundle from another seller.<sup>44</sup>

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*Patents* (June 2015), [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2585528](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2585528); Kobayashi, *supra* note 30, at 707.

<sup>40</sup> DOJ-FTC IP GUIDELINES, *supra* note 5, § 5.3.

<sup>41</sup> Kobayashi, *supra* note 30, at 708.

<sup>42</sup> See Layne-Farrar & Salinger, *supra* note 39, at 11.

<sup>43</sup> *Jefferson Parish Hosp. Dist. No. 2 v. Hyde*, 466 U.S. 2, 16 (1984).

<sup>44</sup> *Abbott & Wright*, *supra* note 39, at 7.

While the economic literature demonstrates the possibility that tying and bundling by sellers with market power can generate anticompetitive harm, “it does not provide a reliable way to gauge whether the potential for harm would outweigh any demonstrable benefits from the practice.”<sup>45</sup> As such, treating tying or bundling as per se or presumptively unlawful can generate significant costs by erroneously condemning or discouraging efficient business practices.

For these reasons, we strongly urge the State Council to revise or clarify Article 16 to adopt an effects-based approach.

#### Article 17 – Imposing Unreasonable Trading Conditions Involving IPRs

We respectfully urge that Article 17 be revised to explicitly adopt an effects-based approach in which licensing restraints are condemned only when any anticompetitive harm they cause outweighs any procompetitive benefits they create. In addition, for the reasons set forth below, we strongly urge that the State Council not base AML violations on charging for expired or invalid patents or entering into agreements that prohibit licensees from challenging validity.

With respect to charging for expired patents, it would be impractical, if not impossible, for portfolio owners to constantly renegotiate licenses (or provide updated patent lists) every time an IPR expires or new IPR is added to the portfolio. Portfolios include patents with a variety of expiration dates, which the parties to the license take into account when negotiating a price.

Similarly, as a practical matter, particularly when large portfolios are involved, an implementer that insists on challenging validity on a patent-by-patent basis around the world may be engaged in bad-faith licensing delay, or holdout. Nevertheless, implementers have the opportunity to challenge the validity of an IPR at any moment from the time the patent office grants the patent at issue until the time it executes a license with a no-challenge clause. A no-challenge clause constrains the implementer’s ability to challenge the validity of an IPR only *after* it has already executed a license agreement. When a licensor and a licensee negotiate a license for a large IPR portfolio, both parties understand that some of the hundreds or thousands of patents in the portfolio may be invalid. The parties do not invest extensive resources in identifying those invalid patents, which would make the transaction prohibitively costly. Instead, the parties assess generally the value of the licensed portfolio and determine a royalty that accounts for the possibility that some of the portfolio’s patents may be invalid. In addition, IPR holders typically remove obsolete patents from the portfolio and add new patents that have become relevant since the parties executed the license agreement. This industry practice of portfolio “rebalancing” further reduces the risk that the presence of a few invalid patents would impose any significant cost on the licensee. Encouraging a licensee to challenge the validity of individual licensed patents invites opportunistic litigation by the licensee so as to delay paying the IPR holder the agreed-upon royalty for the use of the many more valid patents in its licensed portfolio. Thwarting an IPR holder’s ability to receive prompt compensation for its innovative

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<sup>45</sup> Kobayashi, *supra* note 30, at 707.

contribution lessens the IPR holder's incentive to invest in innovation, which in turn imposes significant harm on consumers.<sup>46</sup>

### Article 18 – Differential Pricing Involving IPRs

Article 18 provides that “[i]n IPR-involved transactions, undertakings with market dominant positions may exclude or restrict competition by unjustifiably imposing different licensing conditions on transaction counterparties with substantially the same conditions.” We respectfully urge the State Council to revise Article 18 to recognize that differential pricing in licensing can serve legitimate, procompetitive ends and enhance consumer welfare.<sup>47</sup> With respect to SEPs in particular, whether an SEP holder violates the “non-discriminatory or ND” element of FRAND is wholly dependent on the individual SDO IPR policy at issue, and these policies vary widely.<sup>48</sup> For example, some SDO IPR policies define a FRAND commitment as a commitment to license “all comers,” while others limit the commitment to specific levels of the distribution chain (e.g., end-user products as opposed to component parts, such as chipsets).<sup>49</sup>

Differential pricing in particular helps a firm with fixed costs to recover its outlays and is sometimes necessary for a firm to recover those outlays.<sup>50</sup> Indeed, an important aspect to consider in evaluating differential pricing in licensing as compared to differential pricing for physical goods is the nature of IP development. The innovation process typically involves large upfront investments in research and development yet very low marginal costs at the production stage. Economists have observed that differential pricing can be an important mechanism for

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<sup>46</sup> See J. Gregory Sidak, *Evading Portfolio Royalties For Standard-Essential Patents Through Validity Challenges* (2015), <https://www.criterioneconomics.com/docs/evading-portfolio-royalties-for-seps.pdf>.

<sup>47</sup> See, e.g., Anne Layne-Farrar, *Nondiscriminatory Pricing: Is Standard Setting Different?*, 6 J. COMPETITION L. & ECON. 811, 811, 814-17 (2010) (the existing literature on price discrimination in traditional markets for goods and services and on licensing intellectual property establishes that “price discrimination is not necessarily harmful, and in some cases can even increase consumer welfare; most IP licensing is characterized by ‘discrimination’ in that rates and terms tend to differ across licensees; proof of market power must remain the first step in any inquiry on allegations of anticompetitive IP licensing discrimination; and as of yet, no widely applicable benchmarks or rules for distinguishing harmful from beneficial or non-harmful licensing discrimination have emerged, meaning that a careful, quantitative effects-based analysis remains the best approach.”) [hereinafter Layne-Farrar].

<sup>48</sup> See Tsai & Wright, *supra* note 9, at 161.

<sup>49</sup> Jorge Padilla & Koren W. Wong-Erving, *Portfolio Licensing at the End-User Device Level: Analyzing Refusals to License FRAND-Assured Standard-Essential Patents at the Component Level* at 10 (October 2016), [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2806688](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2806688).

<sup>50</sup> Layne-Farrar, *supra* note 47, at 827 (citing William J. Baumol & Daniel G. Swanson, *The New Economy and Ubiquitous Competitive Price Discrimination: Identifying Defensible Criteria of Market Power*, *Symposium on Competitive Price Discrimination*, 70 ANTITRUST L.J. 661 (2003)).



recovering fixed costs under these circumstances.<sup>51</sup>

Differential pricing can improve efficiency, grow markets, intensify competition, and enhance consumer welfare. Differential pricing can allow firms to expand output, which can be welfare enhancing. Profit-maximizing firms facing distinct consumer demands for a product may reduce prices for the more price-sensitive customers and increase price to the less price-sensitive customers relative to uniform pricing. Differential pricing can therefore enable the firm to reach consumers that would otherwise not purchase the product. Price discrimination may also intensify competition by enabling firms to selectively meet competitor's prices.<sup>52</sup>

Similarly, discriminatory refusals to license or licensing to different parties on different terms may serve legitimate, procompetitive ends. For example, a business may grant licenses to some, but not all, interested potential licensees in order to ensure that licensees have a greater incentive to promote the licensor's technology. Alternatively, in order to maximize its income from the patent, a business may require higher royalties from a company that has lower sales volume or offer lower royalties to a licensee that can offer valuable consideration in trade, such as a cross-license of its IP, which may be netted against the price of a license.

In the United States, nearly all concern over potentially harmful discriminatory licensing has centered on the practices of vertically integrated firms that both hold patents and practice them in a downstream market. This is because a nonintegrated patent holder, with no downstream operations, has less to gain by discriminating among licensees with whom it does not compete.<sup>53</sup> Nonintegrated firms will have an incentive to engage in anticompetitive licensing discrimination only if it increases their total royalty revenues, but often it is increased downstream competition that maximizes the upstream patentee's royalty earnings.<sup>54</sup> If the patent holder is not vertically integrated, then the analysis of allegations of discriminatory licensing should be scrutinized even more rigorously because the circumstances under which an upstream patent holder would have an incentive to disadvantage one downstream licensee over another are narrower.<sup>55</sup> Lastly, the possibility of market expansion and other efficiencies, including the coverage of research and development investments, indicates the need for a cautious approach to

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<sup>51</sup> Layne-Farrar, *supra* note 47, at 827; *see also* CARL SHAPIRO & HAL VARIAN, *INFORMATION RULES: A STRATEGIC GUIDE TO THE NETWORK* (Harvard Business Press 1999); William J. Baumol & Daniel G. Swanson, *The New Economy and Ubiquitous Competitive Price Discrimination: Identifying Defensible Criteria of Market Power*, *Symposium on Competitive Price Discrimination*, 70 *ANTITRUST L.J.* 661 (2003).

<sup>52</sup> Jacques F. Thisse & Xavier Vives, *On the Strategic Choice of Spatial Price Policy*, 78 *AM. ECON. REV.* 122 (1988), 134; *see also* James C. Cooper et al., *Does Price Discrimination Intensify Competition? Implications for Antitrust*, 72:2 *ANTITRUST L.J.* 327 (2005).

<sup>53</sup> *See, e.g.*, Herbert Hovenkamp, Mark D. Janis, & Mark A. Lemley, *Unilateral Refusals to License in the US*, 2 *J. COMPETITION L. & ECON.* 1, 16 (Mar. 2006).

<sup>54</sup> Layne-Farrar, *supra* note 47, at 825.

<sup>55</sup> *Id.* at 828.

assessing discrimination in licensing—including licensing of SEPs—even when vertically integrated firms are involved.

#### **Chapter IV: Concentration of Undertakings Involving IPRs**

##### Article 19: Circumstances Where Transaction Involving IPR Constitutes a Concentration of Undertakings

Article 19 sets forth factors for the Ministry of Commerce (MOFCOM) to consider when determining whether an exclusive license may constitute a concentration under the AML. We are concerned that this provision may be overly broad and unduly burdensome, on both MOFCOM and the parties, and respectfully suggest that the State Council conduct a cost-benefit analysis prior to adopting this provision. In particular, what types of exclusive licenses are likely to raise competitive concerns (i.e., what types of arrangements is Article 19 designed to catch) and does the cost of treating all exclusive licenses that fall under Article 19 outweigh any likely benefits?

##### Articles 21-23

Articles 21-23 govern remedies in mergers or acquisitions involving IPRs. We strongly recommend that these provisions be revised to specify that MOFCOM is interested only in, and therefore the parties should only offer, remedies that are necessary to address the specific competitive concerns with a particular transaction, and that MOFCOM will not use a transaction as an opportunity to restructure the industry or require behavioral or other remedies not directly necessary to approving the transaction under the requirements set forth in the AML. For example, Article 23(iii) provides that “[u]ndertakings generally need to make specific agreements to ensure” compliance with any prior FRAND obligations, and Article 23(iv) provides that undertakings shall charge “reasonable royalties” and “elaborate on calculation methods of licensing rates, payment methods of royalties, fair negotiation conditions and opportunities, etc.” These provisions should be revised to specify that such obligations arise only when such conduct is necessary to resolving any competitive concerns with the transaction at issue.

#### **Chapter IV: Other Cases Involving IPRs**

##### Article 25 – Patent Pools

Article 25 governs the operation of patent pools. We commend the State Council for recognizing that “the patent pool generally reduces transaction costs, increases licensing efficiency, and has the effect of promoting competition.” Indeed, as Nobel Laureate Jean Tirole has written, “[t]here is now widespread agreement among policy makers and economists that patent pools may benefit both intellectual property owners and consumers, provided that the

pools include patents that are complementary or blocking.”<sup>56</sup> Economic evidence also indicates that patent pools encourage innovation.<sup>57</sup> While economic theory indicates that patent pools are more likely to be welfare enhancing if patents are more complementary,<sup>58</sup> it is essential to keep in mind that “patents are rarely perfect complements or perfect substitutes,” and patents that were at one-time complements may become substitutes as they enable new products that compete in downstream markets.<sup>59</sup> As such, economic evidence suggests the need for an effects-based analysis on a case-by-case basis.

Consistent with these economic principles, the U.S. antitrust agencies, the European Commission, and the Competition Bureau of Canada, among others, recognize that pooling arrangements have the potential to generate significant efficiencies, for example, reducing transaction costs (by allowing “one-stop shopping” for patents needed to implement a standard), reducing patent infringement litigation, clearing blocking positions, and mitigating any potential problems of royalty stacking.<sup>60</sup> As such, the U.S. antitrust agencies, for example, analyze pooling arrangements under the rule of reason (an effects-based approach), which requires analyzing the particular pool at issue to determine whether, on balance, the arrangement harms competition.<sup>61</sup> This approach would benefit Chinese consumers because presumptions of competitive harm could have a chilling effect on the creation of procompetitive patent pools by subjecting their organizers to a higher likelihood of liability under the AML.

The factors set forth for considering whether a particular pool eliminates or restricts competition are problematic. In particular, factor (i) would consider the undertakings’ market shares in the relevant market, and factor (vii) would consider whether the undertakings charge an “unfair[ly] high price” or impose other “unreasonable conditions.” With respect to market shares, as explained above in connection with Article 13, there is very little empirical basis to presume any systematic relationship between market structure, competition, and innovation. In other words, market structure, as presently defined by reference primarily to market shares and ease of entry, provides at best a very crude signal of the likely impact any particular conduct will have upon future competition.

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<sup>56</sup> Josh Lerner & Jean Tirole, *Efficient Patent Pools*, 94:3 THE AMERICAN ECON. REV. 691 (June 2004).

<sup>57</sup> *Id.* at 706 (“Determining the impact on ex ante social welfare, however, is likely to be much more difficult: as the literature has emphasized, competition can lead to too much or too little innovation. While we are unable to provide a general answer to this question, we are able to show that under certain conditions, allowing a pool with independent licensing never reduces and may increase ex ante welfare.”).

<sup>58</sup> *See, e.g. id.*

<sup>59</sup> *Id.* at 692 (internal citations omitted).

<sup>60</sup> DOJ-FTC IP GUIDELINES § 5.5; EU HCG ¶ 176 (2014); Competition Bureau of Canada, Enforcement Guidelines for the Licensing of Intellectual Property Ex. 8 at 28 (Sept. 18, 2014), [http://www.competitionbureau.gc.ca/eic/site/cb-bc.nsf/vwapj/cb-eg-ipegs-e.pdf/\\$file/cb-eg-ipegs-e.pdf](http://www.competitionbureau.gc.ca/eic/site/cb-bc.nsf/vwapj/cb-eg-ipegs-e.pdf/$file/cb-eg-ipegs-e.pdf).

<sup>61</sup> *See generally* U.S. DEP’T OF JUSTICE & FED. TRADE COMM’N, ANTITRUST ENFORCEMENT AND INTELLECTUAL PROPERTY RIGHTS: PROMOTING INNOVATION AND COMPETITION 64-66 (2007).

With respect to unfairly high pricing, we refer to our comment above on Article 14, which discusses the dangers of applying an unfairly high pricing prohibition to matters involving IPRs. Similarly, with respect to prohibiting “other unreasonable conditions,” we refer to our comment above on Article 17, and recommend that, should this language be retained, the State Council at the very least specify the types of “unreasonable conditions” to be considered.

### Article 26 – Injunctive Relief

Article 26 would create possible AML liability for “SEP holders with dominant market position” who “apply for injunctive relief to force the licensee to accept unfairly high license fee[s] or other unreasonable licensing conditions.” For the reasons set forth below, we strongly urge the State Council not to impose an AML sanction for merely seeking an injunction. There is no empirical evidence to support the concerns that injunctive relief results in harm to innovation or to consumers, and the burden of establishing any harm from a counterparty’s having sought an injunction should rightly be on those advocating this fundamental policy shift.

In addition, reverse holdup and holdout<sup>62</sup> are both possibilities and therefore creating an AML sanction for the seeking of injunctive relief is likely to have detrimental consequences by disrupting the carefully balanced FRAND ecosystem.<sup>63</sup> Indeed, creating an AML sanction for seeking injunctive relief significantly alters the critical balance between the interests of SEP holders and the interests of implementers. As the European Court of Justice (ECJ) recognized in *Huawei v. ZTE*, it is essential “to ensure a fair balance between the interests concerned.”<sup>64</sup> In addition, imposing an AML sanction is likely to reduce incentives to innovate and deter SEP holders from participating in standard setting, thereby depriving consumers of the substantial

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<sup>62</sup> Holdup requires lock-in, and standard-implementing companies with asset-specific investments can be locked in to the technologies defining the standard. On the other hand, innovators that are contributing to an SDO can also be locked-in if their technologies have a market only within the standard. Thus, incentives to engage in holdup run in both directions. There is also the possibility of holdout. While reverse holdup refers to the situation when licensees use their leverage to obtain rates and terms below FRAND, holdout refers to licensees either refusing to take a FRAND license or delaying doing so.

<sup>63</sup> See, e.g., Luke Froeb & Mikhael Shor, *Innovators, Implementers, and Two-Sided Hold-Up*, ANTITRUST SOURCE at 3 (Aug. 2015), [http://www.americanbar.org/content/dam/aba/publishing/antitrust\\_source/aug15\\_froeb\\_7\\_21f.authcheckdam.pdf](http://www.americanbar.org/content/dam/aba/publishing/antitrust_source/aug15_froeb_7_21f.authcheckdam.pdf) (explaining that the curtailing of injunctive relief serves “to shift bargaining power and profits from innovators to implementers,” which “weakens the value of patents and can significantly reduce the incentive to innovate”); Bernhard Ganglmair, Luke M. Froeb & Gregory J. Werden, *Patent Hold Up and Antitrust: How a Well-Intentioned Rule Could Retard Innovation*, 60 J. INDUS. ECON. 249 (2012) (finding that “enforcement of a FRAND commitment, with damages awarded for excessive license fees, solves the holdup problem, but can retard innovation, and it is even possible that this solution is worse than the problem”).

<sup>64</sup> Case C-170/13, *Huawei Technologies Co. v. ZTE Corp.* ¶ 55 (July 16, 2015), <http://curia.europa.eu/juris/document/document.jsf?text=&docid=165911&pageIndex=0&doclang=EN&mode=lst&dir=&occ=first&part=1&cid=603775>.

procompetitive benefits of standardized technologies.<sup>65</sup> Lastly, injunctions issue only upon a court order. This critical gatekeeper minimizes the risk of any potential harm. As such, the mere seeking of injunctive relief alone does not monopolize the market because courts independently assess whether an injunction is warranted, taking into consideration whether the public interest would be disserved by an injunction.<sup>66</sup> As for the notion that the mere threat of an injunction may cause harm, the *in terrorem* (or fear from threat) effect of filing for an injunction depends on the likelihood of it being granted.

In the alternative, should the State Council decide to adopt an AML sanction for seeking injunctive relief—which we strongly urge it not to do—at the very least, it should limit liability to situations in which there is proof that a FRAND-assured SEP holder has engaged in patent holdup, i.e., that the patent holder used the threat of injunctive relief to demand supra-competitive royalties that are not consistent with prior commitments by the SEP holder. This is necessary to avoid the presumption that an SEP holder who seeks injunctive relief will necessarily use that relief (or the threat of it) to demand supra-competitive royalties.<sup>67</sup> That presumption would be unwarranted because market mechanisms impose a number of constraints that militate against acting upon the opportunity for holdup. For example, reputational and business costs may deter repeat players from engaging in holdup and “patent holders that have broad cross-licensing agreements with the SEP-owner may be protected from hold-up.”<sup>68</sup> In addition, patent holders often enjoy a first-mover advantage if their technology is adopted as the standard. “As a result, patent holders who manufacture products using the standardized technology ‘may find it more profitable to offer attractive licensing terms in order to promote the adoption of the product using the standard, increasing demand for its product rather than

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<sup>65</sup> See Douglas H. Ginsburg, Taylor M. Owings, & Joshua D. Wright, *Enjoining Injunctions: The Case Against Antitrust Liability for Standard Essential Patent Holders Who Seek Injunctions*, ANTITRUST SOURCE 1, 5-6 (Oct. 2014) (explaining, among other things, that the law of contracts is sufficient to provide optimal deterrence) [hereinafter Ginsburg, Owings, & Wright]; see also Bruce H. Kobayashi & Joshua D. Wright, *The Limits of Antitrust and Patent Holdup: A Reply to Cary, et al.*, 78 ANTITRUST L.J. 505 (2012).

<sup>66</sup> See Ginsburg, Owings, & Wright, *supra* note 65, at 2-3, 6.

<sup>67</sup> See Anne Layne-Farrar & Koren W. Wong-Ervin, *Methodologies For Calculating FRAND Damages*, LAW360 at 3-4 (Oct. 8-10, 2014) (explaining that “the actual practice of hold-up requires two elements: opportunity and action,” listing a number of market mechanisms that militate against the opportunity for holdup), [https://www.ftc.gov/system/files/attachments/key-speeches-presentations/wong-erwin\\_-\\_methodologies\\_for\\_calculating\\_frand\\_damages.pdf](https://www.ftc.gov/system/files/attachments/key-speeches-presentations/wong-erwin_-_methodologies_for_calculating_frand_damages.pdf).

<sup>68</sup> See, e.g., Prepared Statement of the Fed. Trade Comm’n, Concerning “Standard Essential Patent Disputes and Antitrust Law,” Before the U.S. S. Comm. on the Judiciary Subcomm. on Antitrust, Competition Policy and Consumer Rights 6 n.16 (July 30, 2013), [https://www.ftc.gov/sites/default/files/documents/public\\_statements/prepared-statement-federal-trade-commission-concerning-standard-essential-patent-disputes-and/130730standardessentialpatents.pdf](https://www.ftc.gov/sites/default/files/documents/public_statements/prepared-statement-federal-trade-commission-concerning-standard-essential-patent-disputes-and/130730standardessentialpatents.pdf).

extracting high royalties”<sup>69</sup> per unit.

Furthermore, any liability theory that would require an SEP holder to prove that an accused infringer is an unwilling licensee threatens to deter participation in standard setting, particularly if an accused infringer can prove willingness simply by agreeing to be bound by terms determined in a neutral adjudication. If the worst penalty an SEP infringer faces is not an injunction but merely paying, after adjudication, the FRAND royalty that it should have agreed to pay when first asked, then reverse holdup and holdout give implementers a profitable way to defer payment—or if they are judgment proof, to avoid payment altogether—and puts SEP holders at a disadvantage that reduces the rewards to, and therefore can only discourage, both innovation and participation in standard setting.<sup>70</sup> In short, creating an AML sanction for the mere seeking of injunctive relief is likely to introduce additional delay, or holdout, in FRAND licensing.

Lastly, should the State Council retain this provision, it should at the very least adopt a safe harbor from AML liability similar to that adopted by the ECJ in *Huawei v. ZTE*.<sup>71</sup> Specifically, an SEP holder that (1) prior to initiating an infringement action, alerts the alleged infringer of the claimed infringement and specifies the way in which the patent has been infringed; and (2) after the alleged infringer has expressed its willingness to conclude a license agreement on FRAND terms, presents to the alleged infringer a specific, written offer for a license, specifying the royalty and calculation methodology, should be free of liability. The ECJ quite properly put the burden on the alleged infringer to “diligently respond” to the SEP holder’s offer, “in accordance with recognized commercial practices in the field and in good faith,” by promptly providing a specific written counter-offer that corresponds to FRAND terms, and by providing appropriate security (e.g., a bond or funds in escrow) from the time at which the counter-offer is rejected and prior to using the teachings of the SEP.<sup>72</sup> This approach is necessary to take into account the conduct of both the patentee and the accused infringer when considering whether to impose an AML sanction.

In its decision, the ECJ recognized that SEP holders have “the right to bring an action for prohibitory injunction or for the recall of products,” and made clear that the SEP holder’s right can be limited only in particular and exceptional circumstances.<sup>73</sup> The decision recognizes

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<sup>69</sup> *Id.*

<sup>70</sup> Such delay tactics are magnified when the patent owner has a large worldwide portfolio of SEPs requiring it to file lawsuits around the world to adjudicate a FRAND royalty on a patent-by-patent basis. In such cases, international arbitration on a portfolio basis would appear to be the most efficient and realistic means of resolving FRAND disputes.

<sup>71</sup> Case C-170/13, *Huawei Technologies Co. v. ZTE Corp.* (July 16, 2015), <http://curia.europa.eu/juris/document/document.jsf?text=&docid=165911&pageIndex=0&doclang=EN&mode=lst&dir=&occ=first&part=1&cid=603775>.

<sup>72</sup> *Id.* ¶¶ 66-67.

<sup>73</sup> *Id.* ¶¶ 65-66, 71.

concerns about reverse-holdup, stating that the Court will not tolerate infringers’ “delaying tactics.”<sup>74</sup> The ECJ reiterates, in multiple places throughout the decision, that its competition analysis involves a situation involving two *competitors*, which suggests that the Court’s holding and analysis is limited to matters involving competitors. Lastly, the ECJ analyzed the seeking of injunctive relief as possible *exclusionary* conduct, as opposed to *exploitative* conduct such as charging excessive or unfairly high royalties.

## CONCLUSION

We appreciate the opportunity to comment and would be happy to respond to any questions the State Council may have regarding this comment.

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<sup>74</sup> *Id.* ¶ 55.