

February 15, 2015

European Commission - DG Enterprise and Industry  
Unit A4 - Industrial Competitiveness Policy for Growth  
Avenue d'Auderghem 45, 1040 Bruxelles, Belgium

Re: Public Consultation on Patents and Standards

Thank you for the opportunity to respond to the Commission's Public Consultation on Patents and Standards. I am an Associate Professor at the S.J. Quinney College of Law at the University of Utah in Salt Lake City, Utah, United States of America. I have held previous academic positions at American University Washington College of Law in Washington, DC, and Washington University in St. Louis, Missouri. In addition, I practiced law for seventeen years at the international law firm Wilmer Cutler Pickering Hale and Dorr LLP (and its predecessor entities), and continue to provide legal advice to clients as an independent consultant.

Both my academic research and legal practice have had a strong focus on intellectual property law and technical standardization. Among my long-term clients is the Internet Engineering Task Force (IETF), the principal global forum for the development of standards and specifications for the Internet. I have also represented numerous standards-development consortia in a range of industries, as well as many companies involved in standards development. I have published numerous articles on these topics in the legal and technical literature (a full list can be found in my CV at <https://faculty.utah.edu/bytes/curriculumVitae.html?id=u0989706>), I am the founding editor of the electronic journal *Law, Policy and Economics of Technical Standards* (SSRN), I edited the reference book *Technical Standards Patent Policy Manual* (ABA Publishing, Chicago: 2007), I serve as Co-Chair of the Technical Standardization Committee of the American Bar Association's Section of Science & Technology Law, and hold various leadership positions at the American National Standards Institute (ANSI) and ASTM International. I also served as a member of the U.S. National Academy of Science's (NAS) Committee on Intellectual Property Management in Standard-Setting Processes, which produced the 2013 report *Intellectual Property Challenges for Standard-Setting in The Global Economy* (Keith Maskus & Stephen A. Merrill, eds., Natl. Acad. Press, Washington DC: 2013). In 2011, I was invited by DG Enterprise and Industry to make a presentation on *ex ante* disclosure of licensing terms at VITA, an SSO which I have studied extensively.

Today, I am pleased to share my experience and perspectives with the Commission on a variety of topics covered by the Public Consultation. Because I have written extensively about some of these topics in the past, I will not repeat the entirety of my analysis in every response, but will simply reference additional literature that the Commission may wish to review.

Thank you again for providing this opportunity for commentary.

Very truly yours,

Jorge L. Contreras

**European Commission - DG Enterprise and Industry**  
**Public Consultation on Patents and Standards**

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***Q 1.1.1 Fields of standardisation involving patents:*** *To your knowledge, in which technological areas and/or fields of on-going standardisation work are patents likely to play an increasingly important role in the near future? What are the drivers behind this increase in importance?*

Response: Although the recent literature on standardization has focused primarily on the ICT sector, standardization occurs in numerous other fields, and patents are likely to become increasingly important in some areas outside of ICT.<sup>1</sup> These areas involve new and emerging technologies that require significant innovative inputs. As such, these technologies are highly amenable to patent protection and standardized features of these technologies would, likewise, be likely to be patented. In 2012, the U.S. National Academy Sciences commissioned a series of case studies regarding the intellectual property landscape of standardization in the areas of bioinformatics, nanotechnology, synthetic biology and sustainable building materials.<sup>2</sup> While patents were not observed to affect any of these areas strongly, standards developers were advised to consider patents issues carefully when embarking on new standardization efforts relating to these emerging technologies.

***Q 1.3.2 Defences by the patent holder:*** *Do you see a risk that a standard setting process could be abused to obtain (preferential) access to patent-protected technologies? Has this happened? Please explain. How can the patent holder defend his/her rights?*

Response: Yes. Such a situation could arise in SSOs having mandatory FRAND or royalty-free licensing commitments if participants deliberately designed a standard to

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<sup>1</sup> NATL. RESEARCH COUNCIL (NRC), INTELLECTUAL PROPERTY CHALLENGES FOR STANDARD-SETTING IN THE GLOBAL ECONOMY 18-19 (Keith Maskus & Stephen A. Merrill, eds., 2013).

<sup>2</sup> The author served as a member of the NAS committee that commissioned these studies, and a contributor to two case studies. The resulting case studies were published, *inter alia*, in Jorge L. Contreras, *Technical Standards and Bioinformatics* in BIOINFORMATICS LAW: LEGAL ISSUES FOR COMPUTATIONAL BIOLOGY IN THE POST-GENOME ERA (Jorge L. Contreras & A. James Cuticchia, eds., 2013); Jorge L. Contreras & Charles R. McManis, *Intellectual Property Landscape of Material Sustainability Standards*, 14 COLUMBIA SCI. & TECH. L. REV. 485 (2013); Andrew W. Torrance & Linda J. Kahl, *Bringing Standards to Life: Synthetic Biology Standards and Intellectual Property*, SANTA CLARA HIGH TECHNOLOGY L. J. 30, 199-230 (2014).

include another participant's patented technology (even if the patent holder did not wish to include its patented technology in the standard). This practice has been called "patent stuffing". The practice can be curtailed only if the SSO permits a patent holder to "opt out" of licensing specified patents on the required terms (usually by submitting an opt-out declaration to the SSO prior to finalization/voting on the standard).

***Q 2.1.2 Trends and initiatives (part 1):*** *The pertinent rules and practices are constantly evolving. Do you see any particular trends? What are recent improvement initiatives that you find promising or worthwhile of attention?*

On February 8, 2015, IEEE amended its patent policy after engaging in a two-year consultative process. The IEEE amendments make clear, among other things, that IEEE members holding patents essential to IEEE standards:

- must offer to license those patents to *all applicants* requesting licenses, and cannot pick and choose among licensees,
- may not seek, or threaten to seek, *injunctions* against potential licensees who are willing to negotiate for licenses,
- may insist that licensees offer them *reciprocal* licenses under their own patents,
- may *arbitrate* disputes over FRAND terms,
- may charge a reasonable royalty that is based, among other things, on the value that the patented technology contributes to the *smallest salable component* of the overall product, and
- should ensure that *subsequent purchasers* of these patents agree to abide by the same commitments.

The IEEE amendments are significant, not so much for the substantive positions that they stake out, but because they represent a concerted effort by SSO members, in the face of vocal minority opposition, to enact policy changes that reflect and clarify their own views regarding the interpretation of the SSO's patent policy. This avenue for clarification is preferable, in my opinion, to discerning the SSO's intent through litigation (in which two parties inevitably present divergent views), or the intervention of regulatory authorities.

***Q 2.1.2 Trends and initiatives (part 2):*** *Are there initiatives outside the SSO domain that you find helpful (e.g. patent quality initiatives by patent offices)?*

Response: An increasing number of firms are making patent licensing commitments outside the SSO framework. This practice occurs both with respect to SSO-developed standards as to which firms have elected to make additional pledges, and with respect to standards that were not developed within SSOs.<sup>3</sup>

In some cases, firms elect to make patent licensing commitments as to standards that were developed within SSOs and as to which additional SSO-based pledges may already exist. The pledges required by SSOs usually require the patent holder either to license its

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<sup>3</sup> This phenomenon is explored in greater detail in Jorge L. Contreras, *Patent Pledges*, Univ. Utah College of Law Working Paper No. 93 (Feb. 10, 2015), [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2525947](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2525947).

standards-essential patents on FRAND or royalty-free terms, or not to assert those patents at all. Secondary licensing commitments, including the maximum royalty commitments and royalty calculation parameters, are typically *not* required by SSOs. However, individual firms or groups of firms sometimes make these additional assurances to the market to further encourage use of the standards. For example, in 2002 NTT DoCoMo, Ericsson, Nokia, Siemens and several Japanese manufacturers pledged that they would license patents essential to the W-CDMA 3G wireless telecommunications standard at rates proportional to the number of such patents held by each company.<sup>4</sup> Similar pledges have been made by these and other firms with respect to subsequent wireless mobile device standards.

In other cases, firms may make licensing commitments as to standards that were not developed within SSOs at all. For example, in 2011 a group of firms including Bank of America, American Greetings, Facebook, Comcast and Google collaborated to develop a method of combatting fraudulent and “spoofed” email.<sup>5</sup> The group did not work through a formal SSO, but independently produced a technical specification called Domain-based Message Authentication, Reporting & Conformance (DMARC), which it released publicly in early 2012.<sup>6</sup> The DMARC group operated primarily via email discussion lists and only required that its participants sign a “Contributor License Agreement” published by the Open Web Foundation (OWF).<sup>7</sup> The OWF pledge prohibits each contributor from asserting its patents against any use of the DMARC specification to achieve the widest adoption of the specification as quickly as possible. The DMARC specification has achieved significant success since its release, reportedly protecting more than 2 billion email accounts worldwide and more than eighty percent of U.S. email users and drastically reducing the number of fraudulent email messages sent to consumers.<sup>8</sup> These non-SSO pledges are facilitated by the existence of standardized template agreements such as those produced by OWF.

***Q 2.1.3 Differences in SSO rules and practices: Do you see significant differences between SSOs in terms of their patent policies and/or treatment of standard essential patents in practice? If so: What are the practical consequences of these differences? Which of these differences (if any) pose problems? Which of these differences are justified?***

Response: SSOs IPR policies differ in important ways that produce meaningfully divergent results. These differences have resulted, in large part, from differences in the business models, approaches to patents and philosophies of SSO members.

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<sup>4</sup> Nokia, Press Release - Industry leaders NTT DoCoMo, Ericsson, Nokia and Siemens, and Japanese manufacturers reach a mutual understanding to support modest royalty rates for the W-CDMA technology worldwide, Nov. 6, 2002.

<sup>5</sup> See DMARC.org, About DMARC.org, <http://www.dmarc.org/about.html> (accessed Oct. 21, 2014).

<sup>6</sup> DMARC.org, DMARC Overview, <http://www.dmarc.org/overview.html> (accessed Oct. 21, 2014).

<sup>7</sup> Openweb Fndn., OWF Contributor License Agreement 1.0 – Copyright and Patent, <http://www.openwebfoundation.org/legal/the-owf-1-0-agreements/owf-contributor-license-agreement-1-0---copyright-and-patent>; DMARC.org, Index of /CLAs, <http://www.dmarc.org/CLAs/>.

<sup>8</sup> DMARC.org, DMARC – What is it?, <http://www.dmarc.org/index.html#statusofDMARC> (accessed Oct. 21, 2014).

One principal difference among SSO IPR policies is at the core of their approach to patents: whether patents must be licensed on terms that are royalty-free or which may be royalty-bearing (at FRAND rates).<sup>9</sup> The American National Standards Institute (ANSI) permits ANSI-accredited SSOs to adopt either approach,<sup>10</sup> recognizing the need for SSOs to adopt policies that best reflect the commercial practices and wishes of their members.

The example of W3C is well-known. That group, which includes a strong contingent of firms that develop, distribute and use open source code software, adopted a policy requiring royalty-free licensing of patents covering W3C standards. Many other SSOs have adopted royalty-free licensing policies.<sup>11</sup> Even in IETF, which has no mandatory licensing commitment at all, a significant majority of participants voluntarily declare that they will not assert patents or will license them on a royalty-free basis.<sup>12</sup>

In today's litigation environment, in which firms, regulators and courts continue to wrestle with determining royalty rates for SEPs that will adequately compensate patent holders, it is important to remember that in many SSOs patent holders request and receive no royalties at all. And despite this approach, large amounts of innovation, technology and interoperable products emerge from such SSOs and the firms that participate in them, at costs that may be lower for the consumer.

***Q 3.2.5 Blanket declarations:*** *Some standard setting organizations require their participants to declare that, in general, they hold essential patents over a standard without requiring that these participants identify each of these patents specifically. Do you believe that such declarations provide for enough transparency? Please justify your answer, where necessary distinguishing situations where you consider that this approach is sufficient from those where you do not.*

A “blanket declaration” is typically not sufficient to give SSO working group members the information required to balance the value of a patented technology to a standard, as compared to the next best alternative, against the potential incremental licensing cost of including that technology in the standard. In other words, specific patent declarations are necessary to enable SSO working groups to work around or replace a patented technology with a less costly alternative. For this reason, IETF does not permit blanket declarations unless the patent holder commits to license its SEPs on a royalty-free basis<sup>13</sup> (thus eliminating the cost factor that might otherwise make the patented technology undesirable).

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<sup>9</sup> I refer to this as the policy's “primary access commitment”. Contreras, Patent Pledges, *supra* note 3, at § 1.C.1.

<sup>10</sup> Am. Natl. Standards Inst., ANSI Essential Requirements: Due Process Requirements for American National Standards, § 3.1.1.b (Jan. 2015).

<sup>11</sup> See, e.g., Brad Biddle, Andrew White & Sean Woods, *How Many Standards in a Laptop? (And Other Empirical Questions)*, 2010 INT'L TELECOMM. UNION SEC. TELECOMM. STANDARDIZATION KALEIDOSCOPE ACAD. CONF. PROC. 123 at fig.2 ([http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=1619440](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1619440)) (finding that 22 percent of 251 laptop computer standards studied were royalty-free).

<sup>12</sup> See Jorge L. Contreras, *Technical Standards and Ex Ante Disclosure: Results and Analysis of an Empirical Study*, 53 JURIMETRICS 163, 182-83 (2013), [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2249926](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2249926) (from 2007-10, 59% of IETF patent disclosures included voluntary non-assertion or royalty-free patent commitments).

<sup>13</sup> Internet Engineering Task Force, RFC 3979: Intellectual Property Rights in IETF Technology § 6.4.3 (Scott Bradner, ed., 2005) (<http://www.ietf.org/rfc/rfc3979.txt>) [hereinafter IETF Patent Policy].

***Q 3.2.6 Scope/detail:*** *Where standard setting organizations require that patent holders identify the relevant patents individually, what information about the patent should be transmitted? Only the patent number or other aspects? What are the respective benefits and costs of requiring that the patent holder also (1) specifies to which part of the respective standard the declared patent belongs and/or (2) explains why the patent is relevant for the standard?*

Once a patent is identified, there is little incremental cost in requiring the patent holder to supply all relevant public information such as title, abstract, inventors, filing date, etc. All of this information can be helpful to working group members evaluating the potential impact of the patent on standards development. Listing the inventors is particularly useful, as it could identify particular working group members who can be approached with inquiries regarding the patented technology.

It is also important for the patent holder to identify which part of a particular standard is covered by a declared patent.<sup>14</sup> Many standards in the ICT sector are hundreds of pages in length, and it is more efficient for the patent holder to point out the relevant section of the standard than to force individual working group members to make this determination themselves.

***Q 3.2.7 Consequence of non-compliance:*** *What should be the consequences if a patent holder has failed to comply with its declaration obligation (for the standard, for the patent holder, for licensing negotiations)? Should the respective standard setting organizations take action and what should this action be? Are the consequences of non-compliance sufficiently clear in your experience?*

There are two broad categories of consequences that can arise as a result of non-compliance with an SSO's IPR policy: private penalties imposed by the SSO and penalties arising under the law. Penalties arising under the law can be imposed by a governmental enforcement agency that brings an action, usually under antitrust/competition law, against the non-compliant party, or in the course of private litigation (either as an affirmative claim for breach of contract or antitrust/competition law violations, or as a defense to a claim of patent infringement by the non-compliant party). Penalties arising under the law, including unenforceability of the non-compliant party's patents, have been discussed extensively in the literature and that discussion need not be repeated here.

Less attention has been paid in the literature to penalties imposed by SSOs on members who have violated their IPR policies. The potential range of such penalties are cataloged in the American Bar Association's *Standards Development Patent Policy Manual*.<sup>15</sup> These include: rejection of the non-compliant party's technical contribution(s), issuance

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<sup>14</sup> See IETF Patent Policy, *supra* note 13, at § 6.4.1 ("if the IETF Document includes multiple parts and it is not reasonably apparent which part of such IETF Document is alleged to be Covered by the IPR in question, it is helpful if the discloser identifies the sections of the IETF Document that are alleged to be so Covered.")

<sup>15</sup> AMERICAN BAR ASS'N, COMM. TECH. STANDARDIZATION, SEC. SCI. & TECH. LAW, STANDARDS DEVELOPMENT PATENT POLICY MANUAL 27-29 (Jorge L. Contreras, ed., 2007).

of a formal warning, ejection of the non-compliant party from the SSO and imposition of automatic royalty-free license grants as to the non-compliant party's affected patent(s).

While a number of SSOs include such penalties “on the books”, in practice the imposition of such penalties is rare. There are several reasons why it may be uncommon for SSOs to impose penalties on non-compliant SSO members. First, as membership organizations, SSOs may be hesitant to take actions that will alienate portions of their membership. Second, given the severe penalties available under the law to other SSO members who are injured by the non-compliance, SSOs and their members may be willing to allow extra-SSO legal actions to address instances of non-compliance.

Finally, violations of SSO policies may be attributable to the inexperience or inattention of individual employees of SSO member firms, and not to overarching corporate policy. As such, the imposition of penalties on the employer member firm may seem overly harsh, particularly if the member firm is otherwise a valuable contributor to the technical work of the SSO. In such instances, the SSO may issue a reprimand to the individual, or, in more severe cases, suspend the individual's posting rights to SSO discussion groups temporarily or even permanently.<sup>16</sup> In at least one instance, when an IPR policy violation by individual an IETF participant<sup>17</sup> was brought to the attention of the employer firm, the firm sought to make amends and voluntarily offered not to assert the relevant patent against implementations of the affected IETF standard.<sup>18</sup>

***Q 6.1.5 Other methods of ensuring reasonableness of licensing terms and conditions: Can patent pool prices for a given standard be a proxy for FRAND terms and conditions? What are the limits of the use of patent pools as a proxy? How can bias coming from such a method be avoided?***

Patent pool royalty rates can, under some circumstances, serve as good indicators of appropriate levels for FRAND royalty rates. The key factor indicating the appropriateness of patent pool rates is the agreement of the pool members that such royalty rates are, indeed, fair and reasonable. Patent pool comparables were used effectively by the court in its assessment of FRAND rates in *Microsoft v. Motorola*<sup>19</sup> and other cases. Of course, pool rates may take into account numerous other factors, such as the value of cross-licenses granted by other pool members. Accordingly, these factors must be taken into

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<sup>16</sup> Cf. Internet Engineering Task Force, RFC 3683: A Practice for Revoking Posting Rights to IETF Mailing Lists (M. Rose, ed., 2004), <http://www.rfc-editor.org/rfc/rfc3683.txt>; Internet Engineering Task Force, RFC 6702: Promoting Compliance with Intellectual Property Rights (IPR) Disclosure Rules (T. Polk & P. Saint-Andre, eds., 2012), <http://www.rfc-editor.org/rfc/rfc6702.txt>, (offering advice to leaders of technical IETF groups regarding the encouragement of compliance with IETF patent disclosure rules).

<sup>17</sup> All participation in IETF is on an individual, not a firm-level, basis. See Paul Hoffman, *The Tao of IETF: A Novice's Guide to the Internet Engineering Task Force* (Nov. 2, 2012), <http://www.ietf.org/tao.html> (“There is no membership in the IETF. Anyone may register for a meeting and then attend. The closest thing there is to being an IETF member is being on the IETF or Working Group mailing lists”).

<sup>18</sup> See Russ Housley, IETF Chair, Message to IETF Mailing List ([ietf@ietf.org](mailto:ietf@ietf.org)), Concerns about the recent IPR Statement from Alcatel Lucent Related to RFC 6073 (July 28, 2011).

<sup>19</sup> *Microsoft Corp. v. Motorola, Inc.*, Findings of Fact and Conclusions of Law, 2013 U.S. Dist. LEXIS 60233 (W.D. Wash., Apr. 25, 2013).

account when using pool rates as comparables for FRAND royalty rates, just as the court in *Microsoft* did.

One significant drawback associated with reliance on patent pools as metrics for setting FRAND royalty rates is the general scarcity of patent pools as compared with SSO-developed standards. As observed by Biddle, et al, of 251 standards implemented in a typical laptop computer, only 3% were subject to patent pools.<sup>20</sup> As I have written elsewhere,<sup>21</sup> the court in *Microsoft v. Motorola* was fortunate that patent pools were formed around the two standards at issue, ITU's H.264 and IEEE's 802.11. However, as even the *Microsoft* court acknowledged, the 802.11 pool formed by Via Licensing did not include a large number of patents and was not an ideal comparable. The situation is far worse for the thousands of SSO-developed standards that are too thinly-adopted, uncertain or short-lived to warrant the formation of a patent pool. Accordingly, it is not likely that the use of patent pool rates will be an effective general approach to assessing FRAND royalty rates for SSO-developed standards, even if it is useful for a handful of broadly-adopted industry standards.

***Q 3.3.3 Check of declarations:*** *Should the quality of patent declarations be submitted to a check by someone other than the declarant? Who should perform this check (peer review by members of the standard setting organization; standard setting organizations themselves; third parties on behalf of the standard setting organizations; patent offices; etc.)? What should be the scope of the check (essentiality for the standard; validity; enforceability; other)? Who should bear the cost of such a check? If you think the declarant should bear (part of) the cost, how can it be prevented that this creates an incentive to disrespect the declaration obligation?*

As I have written previously, imposing a verification system for SEP declarations at SSOs is impractical:

Such a vetting process would typically be cost-prohibitive in the context of SDO-based standards. Some SDOs produce hundreds or thousands of standards in a wide range of product areas. Many SDO standards are never widely adopted or have limited application, so much of the up-front investment of resources to determine essentiality would be wasted.<sup>22</sup>

In the pseudo-pool approach that I have proposed (see Response to Q.6.4.2), other SSO members are permitted to challenge the essentiality of declared SEPs through an ADR mechanism. If they are successful, the patent holder is penalized in terms of its share of the aggregated royalty pool to which it is entitled.<sup>23</sup> Vetting SEP declarations is thus left to the market. If other SSO members feel that a SEP has been incorrectly declared, and it is in their financial interest to challenge the declaration, they can do so at their expense.

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<sup>20</sup> Biddle, *supra* note 11, at Fig. 2.

<sup>21</sup> Jorge L. Contreras, *So That's What "RAND" Means?: A Brief Report on the Findings of Fact and Conclusions of Law in Microsoft v. Motorola*, Patently-O, Apr. 27, 2013, <http://patentlyo.com/patent/2013/04/so-thats-what-rand-means-a-brief-report-on-the-findings-of-fact-and-conclusions-of-law-in-microsoft-v-motorola.html>.

<sup>22</sup> Jorge L. Contreras, *Fixing FRAND: A Pseudo-Pool Approach to Standards-Based Patent Licensing*, 79 ANTITRUST L.J. 47, 77 (2013), [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2232515](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2232515).

<sup>23</sup> *See id.* at 82-83.

The payoff to the challenger is the removal of the SEP from the pool of royalties in which they share. The penalty structure likewise encourages the patent holder to be as accurate as possible in declaring its SEPs.

***Q 3.4.1 Publication:*** *Should standard setting organizations make the declared patent information publicly available? Do you see any impacts on the protection of personal data? Under what conditions would it be justifiable to restrict access or to charge for access?*

Patent declaration information is critical to the markets that depend on standardized technologies, to new market entrants, and to all implementers of standards. It should be made publicly available. There are no significant countervailing implications for personal data and, if there are, SSOs could exclude that limited personal data from the public disclosure.

***Q 3.5.1 General question:*** *What can be done to increase standardisation-related patent transparency other than to strengthen the system of patent declarations used by standard setting organizations?*

I have proposed the creation of a centralized registry for FRAND commitments and other patent pledges.<sup>24</sup> Participating SSOs could require or encourage the submission of data to the registry, and contribute their own public records of patent and licensing declarations to it. Such a registry should be searchable across SSOs and other bodies, should contain data in a uniform format, and should be openly accessible to the public. Several organizations are likely candidates to host this registry, including one or more national or regional patent offices (e.g., the USPTO or EPO), the World Intellectual Property Organization (WIPO) or a private firm. A detailed analysis of the need for, and potential structure of, such a registry is described in a recent paper.<sup>25</sup>

***Q 4.2.3 Transfer of FRAND commitment:*** *How can it be ensured that the new owner of the transferred SEP is bound by the FRAND licencing commitment given by the initial owner? What can standard setting organizations do in this regard? What do the sellers of the SEPs need to do? Should the licencing terms (including royalty rates) practiced by the initial owner influence the interpretation of the concept of "FRAND" for the new owner?*

Many of the theories used by agencies and courts to seek to enforce FRAND commitments and other patent pledges (e.g., common law contract and antitrust) have notable weaknesses and may not be useful as general means for enforcing these pledges.<sup>26</sup> Their weaknesses are exacerbated when transfers of underlying patents are taken into account. In order to address these, and other issues surrounding enforcement of patent pledges, I have proposed that FRAND commitments and other “actionable” pledges be rendered enforceable against all market actors. The theoretical basis for this enforceability is rooted in the common law principle of promissory estoppel, which also

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<sup>24</sup> See Contreras, Patent Pledges, *supra* note 3, at Part III.

<sup>25</sup> *Id.*

<sup>26</sup> See Jorge L. Contreras, *A Market Reliance Theory for FRAND Commitments and Other Patent Pledges*, \_\_ UTAH L. REV. \_\_ (2015, forthcoming), [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2309023](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2309023).

finds analogies in civil law notions of unilateral contract. The public registry described in the Response to Q.3.5.1 would further bolster arguments for the enforceability of these commitments against all market actors, whether or not they are the original patent holders.

**Q 6.2.2 Unilateral ex-ante disclosure:** *Would you welcome a larger role for unilateral ex-ante disclosure of licensing terms in order to facilitate the licensing of SEPs? What form could it take? How should SSO mechanisms be shaped to facilitate this instrument? Should they be mandatory or voluntary? Should the disclosure only concern the most restrictive terms?*

I have previously shared my views regarding *ex ante* disclosure of licensing terms with the Commission, so I will not repeat those here.<sup>27</sup> I would only point out two additional considerations. First, based on my experience, VITA, which began to require mandatory *ex ante* disclosure of maximum licensing rates and other terms in 2007, has continued to do so and remains quite satisfied with the results. Second, while voluntary *ex ante* disclosure of specific monetary royalty terms has been rare in the two SSOs which expressly permit it (ETSI and IEEE), voluntary *ex ante* disclosure of royalty-free licensing terms is common at IETF. Thus, the reluctance of firms to make *ex ante* disclosures is likely not motivated by a general reluctance to disclose future business plans, but a reluctance by patent holders seeking to maximize licensing revenue to disclose high rates that could lead standards developers to design around their patents. Nevertheless, despite the potential benefits of *ex ante* rate disclosure, I do not believe that it is a suitable general solution to alleviate issues that arise in standard-setting, particularly royalty stacking.<sup>28</sup> To address stacking issues, see Response to Question 6.4.2, below.

**Q 6.4.2 Co-ordination mechanisms:** *What forms of voluntary co-ordination mechanisms are, or could be, efficient for situations of royalty stacking? Should they be limited to a single standard, or cover families of standards, or cover all standards related to a type of product? How can the abuse of such mechanisms, for example by a group of dominant license-takers, be avoided?*

I have previously proposed that the uncertainty associated with royalty-stacking of SEPs can be alleviated by SSO (i.e., member) agreement on aggregate royalty caps applicable to all SEPs covering a given standard or set of standards (what I termed a “pseudo-pool” approach).<sup>29</sup> I was gratified that the Commission took note of this proposal in its comprehensive 2014 study of patents and standards.<sup>30</sup> Because the proposal is quite detailed and the Commission is already aware of it, I will not repeat the analysis here. I

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<sup>27</sup> Jorge Contreras, Experiences and Practices of Ex Ante Disclosures in Standard-Setting, Presentation at European Comm’n, Enterprise and Industry Directorate-General, The Ex Ante Declaration of Licensing Rights (Brussels, Belgium, July 15, 2011). See generally Contreras, Ex Ante, *supra* note 12, at 206-08 (discussing the failure of firms to make *ex ante* rate disclosures under a voluntary disclosure system).

<sup>28</sup> See Contreras, Ex Ante, *supra* note 12, at 208-10.

<sup>29</sup> Jorge L. Contreras, *Fixing FRAND: A Pseudo-Pool Approach to Standards-Based Patent Licensing*, 79 ANTITRUST L.J. 47 (2013).

<sup>30</sup> EUROPEAN COMM’N – DIRECTORATE-GENERAL FOR ENTERPRISE AND INDUS., PATENTS AND STANDARDS: A MODERN FRAMEWORK FOR IPR-BASED STANDARDIZATION 140 (2014) (based on a 2012 proposal that I submitted to the International Telecommunications Union (ITU), [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2159749](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2159749)).

would only add, based on research undertaken after the proposal's publication, that it is possible for the pseudo-pool approach to be adapted for use with single standards, groups of standards developed at the same SSO, and the full set of standards embodied in a single product. All that is required (though this is certainly not trivial in practice) is for the relevant technical communities to come together and agree on the relevant aggregate cap. In fact, a full-product royalty cap would produce the greatest efficiencies of all, as it would eliminate all standards-based stacking uncertainty associated with an entire product.

I also reiterate my earlier plea for competition authorities worldwide to make clear to the standardization community that such aggregate royalty cap agreements, so long as they are reached through an open and inclusive process, do not present competition law concerns. Currently, it is my suspicion that those who oppose limitations on patent royalties invoke the specter of antitrust and competition law concerns to preclude discussions of aggregate royalty caps from occurring, or even being considered, at SSOs. This appears to have occurred in 2005, when a proposed ETSI royalty cap was largely scuttled after the Commission's attention was drawn to the proposal.<sup>31</sup> An official clarification from the Commission today would do much to reassure the market that such arrangements will be viewed as pro-competitive.

***Q 6.6.1 [Non-Discrimination] Definition in practice:*** *In your opinion, what is the best definition of the non-discrimination principle? What aspects of non-discrimination do you find important? Is there sufficient clarity on what non-discrimination means and how it is to be applied in practice? ...*

There are two general understandings of the “Non-discrimination” prong of the FRAND commitment.<sup>32</sup> One of these holds that the commitment requires a patent holder to license SEPs to all applicants, irrespective of their position or function in the supply chain and whether or not they are competitors of the patent holder. I have termed this the “All Applicants” interpretation of non-discrimination. The other interpretation holds that non-discrimination requires the patent holder to offer comparable terms, including royalty rates, to each licensee, or possibly to each licensee at a given tier of the distribution channel (the “Uniform Terms” interpretation).<sup>33</sup>

FRAND commitments are private ordering mechanisms agreed by groups of firms that collaborate to develop industry standards. To the extent possible, these commitments should be interpreted to reflect the intentions of the parties making them rather than any externally-imposed definition. Of course, it has been the industry's recent experience that FRAND and other SSO commitments have been specified with insufficient clarity to

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<sup>31</sup> CLAUDIA TAPIA, INDUSTRIAL PROPERTY RIGHTS, TECHNICAL STANDARDS AND LICENSING PRACTICES (FRAND) IN THE TELECOMMUNICATIONS INDUSTRY 165-66 (2010).

<sup>32</sup> One of the most common variants of this commitment is found in the ANSI Essential Requirements, which require license terms to be “demonstrably free of any unfair discrimination.” ANSI Essential Requirements, *supra* note 10, at § 3.1.1.b.

<sup>33</sup> For a more detailed discussion of these two interpretations and their basis in the U.S. case literature, see Jorge L. Contreras, *A Brief History of FRAND*, Parts IV.A and IV.B, 80 ANTITRUST L.J. \_\_\_ (forthcoming 2015), [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2374983](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2374983).

enable adjudicators to determine how they should be interpreted.<sup>34</sup> Thus, a host of external indicia have been superimposed on the language agreed by the parties to determine whether the underlying commitments have been honored or violated. To some degree, this interpretive exercise is inevitable when commitments are under-specified, as the adjudicator must reach a decision and the interpretations advanced by the parties are often diametrically opposed and necessarily self-serving.

However, a more efficient and predictable system emerges when SSO members take pains to describe their intentions with sufficient detail, thus eliminating the need for adjudicators and regulators to guess about these intentions *ex post*. For this reason, the IEEE's recent policy amendments, which among other things explain that IEEE members must offer to license their SEPs to all applicants, lend needed clarity to the IEEE's definition of non-discrimination.

Of course, IEEE's policy applies only to IEEE, and other SSOs may have different understandings of their own non-discrimination clauses. A more generally-applicable definition of this elusive term would be called for only if some national or regional oversight body (e.g., ANSI in the U.S or the Commission in Europe) elected to mandate a particular interpretation of non-discrimination on all SSO under its jurisdiction. Such measures, however, would have to be taken in a *regulatory* capacity, with the intention to shape SSO practices so as to increase public benefit, rather than as an *interpretation* of private SSO intentions.

***Q 7.2.4 Benefits of ADR: What are the benefits of alternative dispute mechanisms applied to SEP disputes respectively for patent holders and/or patent users? What are the most important conditions to ensure that these benefits materialize?***

If SSOs required the resolution of disputes regarding FRAND terms by ADR (arbitration), benefits would accrue to both patent holders and licensees.<sup>35</sup> Arbitration is often regarded as faster and less financially burdensome on the parties than patent litigation (at least as it is experienced in the U.S.). Arbitrators can be selected from individuals having expertise in the relevant technology and legal disciplines, rather than generalist judges (and, in the U.S., juries). And the results of arbitration proceedings are enforceable internationally via the New York Convention,<sup>36</sup> whereas judicial orders and decisions are generally not enforceable outside the jurisdiction in which they are rendered.

Some may argue that arbitration is less desirable than litigation from a systemic standpoint, as litigation results are typically made public and thereby inform the market

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<sup>34</sup> This problem was first highlighted a dozen years ago in disputes between Rambus, Inc. and potential licensees of Rambus's SEPs. In affirming the lower court's ruling that Rambus was not liable for common law fraud, the U.S. Court of Appeals for the Federal Circuit noted the "staggering lack of defining details in the [SSO] patent policy" *Rambus, Inc. v. Infineon Technologies AG*, 318 F.3d 1081 (Fed. Cir. 2003).

<sup>35</sup> For a more detailed discussion, see Jorge L. Contreras & David L. Newman, *Developing A Framework For Arbitrating Standards-Essential Patent Disputes*, 2014 J. DISPUTE RESOL. 23 (2014), [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2335732](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2335732).

<sup>36</sup> U.N. Convention on the Recognition and Enforcement of Foreign Arbitral Awards (New York, 1958).

regarding royalty rates and other determinations made by the court. However, this outcome is also possible with arbitration. Though the results and reasoning of arbitration are often kept confidential by the parties and tribunal, this is not a requirement. If an SSO that wished to ensure that information regarding the resolution of disputes over its IPR policy became public, it could require members to agree to waive confidentiality restrictions regarding the outcome of their arbitration proceedings concerning the SSO's policies.<sup>37</sup> The SSO could even collect and publish these results for the benefit of its other members and the public.

***Q 7.3.4 Voluntary/mandatory:*** *What are the benefits and risks of making ADR mandatory for the resolution of SEP disputes? What consequences would this have for participation in standardisation, for licensing negotiations and for the implementation of a standard? If ADR would be made mandatory: Should it be linked to membership in SSOs, or to the fact of contributing a patented technology to a standardisation process, or other? Should there be an opt-in/opt-out possibility at the declaration stage? Should ADR replace litigation completely or should it be a mandatory step (e.g. mediation) before litigation?*

Purely voluntary mechanisms do not work particularly well to change behavior when parties (or their attorneys) have an interest in the *status quo*. The patent litigation bar is familiar and comfortable with court-based litigation, and thus shifting to an arbitral adjudication system without a mandate from either the SSO or a rulemaking authority seems unlikely.

Mandating ADR for FRAND disputes seems like a good idea for the reasons discussed above. However, this is a decision for each individual SSO to make. Moreover, I would limit mandated ADR to disputes over the SSO's IPR policy, and would not extend it to all disputes involving SEPs. Issues of patent infringement, validity and the like may be best resolved by the courts using standard judicial techniques and recourse to appeal, though parties can certainly agree to arbitrate these issues if they wish.

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<sup>37</sup> Contreras & Newman, *supra* note 35, at Part III.D.

**Q 7.4.1 Specificities of ADR for SEP disputes:** Which particular features should ADR mechanisms have in order to be (more) suitable for SEP disputes? What would constitute a ADR mechanism "tailor-made for SEP disputes"?

The following table (adapted from a recent article)<sup>38</sup> lays out many of the issues that will arise with the arbitration of FRAND/SEP disputes. These issues marked with an "\*" are discussed in greater detail in the article.

Feature	Comments
*Voluntary v. Mandatory arbitration	Is arbitration of FRAND disputes required or only suggested/recommended? [III.A]
Institutional v. Ad Hoc arbitration	Will arbitration be conducted by an arbitration institution such as AAA, WIPO, ICC or JAMS, or organized either by the parties or SDO using self-developed rules or the UNCITRAL arbitration rules?
Arbitration institution	If arbitration will be institutional, which institution will be selected: AAA, WIPO, ICC, JAMS, or others?
Choice of law	What substantive law will govern the dispute and the arbitration? Which judicial procedural rules will govern the arbitration proceedings, if required?
Location of arbitration	Where will the arbitration proceeding take place?
Language of arbitration	In what language will the arbitration be conducted?
Number of arbitrators	Will there be one, three or some other number of arbitrators?
Qualifications of arbitrator(s)	Will the SDO specify particular qualifications for the individuals who may serve as arbitrators?
Disqualification of arbitrator(s)	What types of conflicts, etc. should disqualify an arbitrator from hearing a dispute? Should these be specified at a level beyond the rules of the arbitration institution?
Selection of arbitrator(s)	Arbitrators can be selected by the arbitral institution, the SDO or the parties
*With whom to arbitrate?	Must SDO members arbitrate only disputes with other members, or with all potential licensees? [III.B]
*Issues to arbitrate	Should arbitration be required only for determination of a FRAND royalty rate, other terms offered by the patentee, other issues (including patent validity, infringement and essentiality), or for other related disputes as well (e.g., antitrust, contract, etc.)? Must the patent holder's entire portfolio of SEPs be brought into the arbitration? [III.C]

<sup>38</sup> *Id.* at Appendix B.

Feature	Comments
*Confidentiality	what, if any, information from the arbitration should be non-confidential, (2) to whom should such information be accessible, and (3) what, if any, exceptions should exist to permit parties to exclude sensitive proprietary materials from release
*Reasoned decision	Should the arbitrator(s) be required to render a reasoned decision? [III.E]
*Preclusive effect	To what degree should an arbitral decision have a preclusive effect on parties that were not involved in the arbitration? [III.F]
*Baseball v. Conventional arbitration	Will “baseball” (best offer) arbitration be used? [III.G]
*Injunctions	Will the parties be precluded from seeking injunctive relief during the pendency of the arbitration? [III.H]
Evidence taking; discovery	To what degree will discovery be permitted in the arbitration (witnesses, depositions, interrogatories, etc.)
Experts	To what degree will expert testimony be admitted in the arbitration? Will the arbitrator have the ability to appoint his or her own impartial experts?
Analysis	Will the SDO specify a particular analytical methodology for the arbitrator to follow when calculating a FRAND royalty?
Costs	How are the costs of the arbitration allocated between the parties?
Timing	What time periods and deadlines will be established for notices and the arbitration proceedings?
Escalation	Will good faith negotiation and/or non-binding mediation be required before the initiation of arbitration?