This document is the collation of public input received in response to the Call for Comments by the IEEE SA Standards Board Patent Committee (PatCom) conducted at the direction of the IEEE SA Board of Governors (BOG) and initiated on 24 August 2021.
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**Option i: No change to the text of the 2015 Patent Policy**

**Pros:**

- Google supports the current IEEE Patent Policy because: (a) it is fair to all IEEE stakeholders, (b) it appropriately balances stakeholder interests, (c) it offers clear guidance that reduces disputes, and (d) it restricts the types of abusive behaviors that have regularly led to litigation in the context of other SSOs whose policies are less clear.

- Google offers leading web-based products and services that are used daily around the world. With over 100,000 employees, Google invests over $20 billion annually to invent and develop its products and services, and it relies on a strong and balanced patent system to protect them, owning tens of thousands of patents worldwide. Google likewise uses standards in its products and services, including IEEE standards, and supports balanced solutions to standard essential patent (SEP) policy issues, such as the IEEE Patent Policy.

- Efforts to alter the Patent Policy would negatively affect the ecosystem for development, use and promulgation of IEEE standards. We strongly urge the IEEE-SA to retain the existing Patent Policy without revision.

**Cons:**

- Google does not believe there are any appreciable benefits to revising the IEEE Patent Policy.

**Comments regarding the ongoing use of the Custom LOA form under this option:**

- For PARs issued prior to the effective date of the Patent Policy, Google supports continuing availability of the Custom LOA form, but does not support availability of the Custom LOA form for PARs issued thereafter.

**Option ii(a): Remove all of the Patent Policy provisions regarding Prohibitive Orders**

**Pros:**

- Google does not believe there are any appreciable benefits to revising the IEEE Patent Policy.
Cons:

Google has experienced the problems and harms that can accompany SEP injunction demands. Such demands often are used to coerce unfair licensing terms and rates that go well beyond the value of the patented invention. IEEE was right to specify that Prohibitive Orders should not be available in many circumstances, and the Patent Policy text has helped IEEE standards to avoid the excessive disputes and litigation that is experienced with standards promulgated by other SSOs with less robust patent policies. See Carrier, Michael A. and Scarpelli, Brian, How Standard-Setting Orgs Can Curb Patent Litigation (June 15, 2021). Law360 (June 15, 2021), Available at SSRN: https://ssrn.com/abstract=3934899.

Removing the provisions regarding Prohibitive Orders would likely increase disputes involving IEEE standards, and enable abusive behaviors by patent holders that seek excessive licensing terms. Moreover, in such an environment, incentives to invest in developing and selling products using IEEE standards would be reduced. The current Patent Policy provides for fair compensation to the patent holder without resorting to Prohibitive Orders, and reserves use of Prohibitive Orders to only those limited scenarios where market exclusion could be necessary to protect the patent holders’ rights when an “implementer fails to participate in, or to comply with the outcome of, an adjudication, including an affirming first-level appellate review.” IEEE-SA Standards Board Bylaws Subclause 6.2, Paragraph 12. IEEE and IEEE stakeholders would receive no benefit if IEEE were to remove this language.

Comments regarding the ongoing use of the Custom LOA form under this option:

For PARs issued prior to the effective date of the Patent Policy, Google supports continuing availability of the Custom LOA form, but does not support availability of the Custom LOA form for PARs issued thereafter.

Option ii(b): Remove all optional factors included in the definition of Reasonable Rate

Pros:

Google does not believe there are any appreciable benefits to revising the IEEE Patent Policy.

Cons:

Google supports maintenance of the Patent Policy’s text regarding Reasonable Rates. The Patent Policy offers much-needed clarity and guidance to negotiating parties, reducing disputes and facilitating RAND practices and resolutions. Removing the optional factors would reduce predictability and increase disputes around licensing terms. Removing the optional factors would also facilitate abusive licensing demands that are excessive as compared to the value of the underlying patents. IEEE and IEEE stakeholders would receive no benefit if IEEE were to remove this language.
Comments regarding the ongoing use of the Custom LOA form under this option:

For PARs issued prior to the effective date of the Patent Policy, Google supports continuing availability of the Custom LOA form, but does not support availability of the Custom LOA form for PARs issued thereafter.

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Pros:

- Google does not believe there are any appreciable benefits to revising the IEEE Patent Policy.

Cons:

- Google does not support a situation where parties might become subject to different licensing rules under the Patent Policy. As addressed previously, the Patent Policy’s text regarding Prohibitive Orders is fair to all stakeholders, and facilitates RAND licensing without excessive disputes or abusive behaviors. IEEE and IEEE stakeholders would receive no benefit if IEEE were to make the text regarding Prohibitive Orders optional.

  - Google likewise sees no benefit to any purported clarification regarding the optionality of the factors included in the definition of Reasonable Rate. Those factors already are expressly optional, so it is unclear how to offer any additional confirmation of this fact, or why it would be helpful to do so.

Comments regarding the ongoing use of the Custom LOA form under this option:

For PARs issued prior to the effective date of the Patent Policy, Google supports continuing availability of the Custom LOA form, but does not support availability of the Custom LOA form for PARs issued thereafter.
Option i: No change to the text of the 2015 Patent Policy

Pros:

The IEEE Patent Policy helps to support the success of IEEE’s standards. It provides clarity in the marketplace, reduces disputes, and preserves and protects the benefits of competition. It fairly balances the interests of SEP holders and users of IEEE standards. It ensures that implementers and users of IEEE standards can disseminate new technologies to consumers quicker and helps IEEE standardised technologies maintain competitiveness with respect to other standardised technologies (notably 3GPP mobile network technologies, whose dissemination and influence over the long term may be sustained by facilitating implementation1). Sky UK is a subsidiary of the Comcast Group and an implementer of customer-premise equipment (CPE). The IEEE 2015 Patent Policy as it stands is crucial for us to feel comfortable with investments made in product development and deployment. We would additionally want to point out that the 2015 policy is still sufficiently new that a proper evaluation of its effect on relations between SEP holders in the IEEE standards space, or the relations between SEP holders and standards users, could hardly be made at this time. The default period for review of an IEEE Standards Project is ten years (see IEEE Standards Board Operation Manual section 9), but the Patent Policy is currently only in force for six years. Revising the policy might increase opportunities for opportunistic conduct by SEP holders.

Cons:

No cons identified for us.

Comments regarding the ongoing use of the Custom LOA form under this option:

The IEEE Standards Association should make greater efforts to ensure that the Custom LOA is used not only for new standards projects, but also for amendments to already existing projects. The amendments procedure foreseen in the IEEE-SA Standards Board Operation Manual Section 8.1.2 should not, in our view, be used to work around the conflict resolution strategies promoted by the 2015 Patent Policy. For standards projects initiated prior to the effective date of the Patent Policy, the custom LOA form could still be permitted so that parties may make a declaration pursuant to the text of the IEEE policies that were in effect at the time the project was initiated. For projects initiated after adoption of the Patent Policy, the custom LOA form should not be permitted. The Standards Board of the IEEE-SA may wish to consider adopting more strict requirements for considering when an amendment PAR is excessive and therefore would require a new working group.
Option ii(a): Remove all of the Patent Policy provisions regarding Prohibitive Orders

Pros:

| There are no benefits to removing the Patent Policy’s express limitations on prohibitive orders. |

Cons:

| The use of injunctions or similar prohibitive orders against IEEE standards would be bad for IEEE, for IEEE participants, and for consumers. Unless the SEP holder is unable to obtain RAND compensation via other means, such as court adjudication, SEP prohibitive orders are tools of hold up, which interfere with the use and promulgation of IEEE standards. The IEEE Patent Policy correctly balances the interest of SEP holders that seek reasonable compensation with the interests of users of IEEE standards to not be subject to abusive demands and tactics. |

Comments regarding the ongoing use of the Custom LOA form under this option:

| See comments under option 1. |

Option ii(b): Remove all optional factors included in the definition of Reasonable Rate

Pros:

| There would be no benefit to removing the optional factors in the definition of Reasonable Rate. |

Cons:

| Increasing uncertainty around SEP licensing terms would inhibit negotiations, increase the risk of disputes, create potential for hold-up, and undermine adoption of IEEE standards. The Patent Policy properly balances the interest of SEP holders that seek reasonable compensation with the interests of users of IEEE standards to have certainty in investment, technology choice and product deployment. In Sky UK’s experience from video codec standards, other standards bodies that seek to determine reasonable rates through e.g. patent pools outside of the main standardisation activity risk creating untenable situations wherein implementers have to join several pools with different rates and still find themselves in a position of poor legal certainty. Resolution of conflicts arising from this legal uncertainty is both costly and time-consuming, with detrimental effects in every upstream and downstream level of the market chain. Ending up in the situation where courts in multiple jurisdictions are called upon to simultaneously establish mutually disjoint or partially overlapping factors for defining reasonable rates (cf. ongoing litigations over mobile networking technologies) is also not desirable – firstly, it is costly (both during and after litigation), secondly, it is time-consuming (both during and after litigation), and thirdly, it decreases confidence in the technologies subject to litigation and the capacity of SEP holders and implementers to bring these technologies efficiently to market. The IEEE SA should rather consider the present uncertainties in other parts of the networking industry as an opportunity to bring their own standards to the forefront by providing implementers and users with a high degree of certainty. |

|
Comments regarding the ongoing use of the Custom LOA form under this option:
See comments under option 1.

Option iii: Offer more options than before by: Allowing an LOA filer the ability to choose whether it may seek or not seek Prohibitive Orders in accordance with the current wording of the Patent Policy; and Clarifying the optionality of the factors included in the definition of Reasonable Rate.

Pros:

| There would be no benefits to these approaches. |

Cons:

| As to 3(i), IEEE should not create approaches supporting injunctive relief against IEEE standards. The IEEE Patent Policy already provides for the use of prohibitive orders where compensation is not available via less drastic means (e.g., via royalty adjudication). The IEEE Patent Policy correctly balances the interest of SEP holders that seek reasonable compensation with the interests of users of IEEE standards to not be subject to abusive demands and tactics. Option 3(i) would cause confusion and negatively impact IEEE standards. As to 3(ii), the optionality of the factors in the Patent Policy already is well addressed in the policy, and also in the IEEE’s FAQs. Further efforts to modify the text are unnecessary and may cause confusion. |

Comments regarding the ongoing use of the Custom LOA form under this option:
See comments under option 1.
Option i: No change to the text of the 2015 Patent Policy

Pros:

None
Cons:

There are a number of issues with the 2015 Patent Policy, including but not limited to the two identified for possible change in this Call for comments. For example, the repeated use in the 2015 policy of references to commitments applying to "portions" of "clauses" of IEEE standards is highly unusual and could lead to claims that IEEE standards commitments apply to products that do not implement IEEE standards. Notwithstanding that and other issues, we will restrict the remainder of our remarks to the issues identified for potential change here.

Retaining the provisions at issue would result in the IEEE remaining an outlier with respect to SDO IPR policies that purport to request commitments to license on FRAND terms and would result in the IEEE policy remaining at odds with the way FRAND commitments are being interpreted and applied by courts around the world. More specifically:

SECTION 6.1

Section 6.1’s use of a specific methodology for calculating a “reasonable” royalty runs counter to the growing body of law that demands flexibility, and a case-by-case, fact-driven approach for assessing reasonable royalties.

• Most recently, in HTC Corporation v. Telefonaktiebolaget LM Ericsson, -- F.3d – (5th Cir. Aug. 31, 2021) (“HTC 1”), in the context of a FRAND contractual dispute, the Fifth Circuit rejected HTC’s challenge to the district court’s jury instruction that “whether or not a license is FRAND will depend upon the totality of the particular facts and circumstances existing during the negotiations and leading up to the license. . . . [T]here is no fixed or required methodology for setting or calculating the terms of a FRAND license rate.” Slip. Op. at 6.

• In Commonwealth Scientific and Indus. Research Organisation v. Cisco, 809 F.3d 1295, 1301 (Fed. Cir. 2015), in the context of a FRAND patent infringement dispute involving SEPs for the IEEE’s 802.11 standard, the Federal Circuit instructed that “there may be more than one reliable method for estimating a reasonable royalty,” and that “adaptability” is necessary “because different cases present different facts. And as damages models are fact-dependent, [a] distinct but integral part of [the] inquiry [of whether evidence is admissible] is whether the data utilized in the methodology is sufficiently tied to the facts of the case.”

• In Unwired Planet Int’l v. Huawei Technologies Ltd., [2020] UKSC 33, ¶¶ 42-45, the UK Supreme Court left undisturbed the Appeals Court’s analysis of competing methods for determining FRAND royalties for a worldwide portfolio license, and ultimately adopting a comparable license methodology cross-checked by a top-down approach.

Smallest Saleable Compliant Implementation

Section 6.1’s use of the smallest saleable Compliant Implementation as the basis for calculating a reasonable royalty runs counter to a growing body of case law. Effectively, this provision imposes the smallest saleable patent practicing unit as the royalty base for the calculation of FRAND royalties (“SSPPU”), an approach that has been repeatedly rejected. For example:

• In FTC v. Qualcomm, 969 F.3d 974, 998-99 (9th Cir. 2020), the Court expressly stated that “[n]o court has held that the SSPPU concept is a per se rule for ‘reasonable royalty calculations.’” Rather, “[s]ophisticated parties routinely enter into license agreements that base the value of the patented inventions as a percentage of the commercial products’ sales price,’ and thus ‘[t]here is nothing
inherently wrong, with using the market value of the entire product [as a royalty base].”

• In Ericsson Inc. v. D-Link Systems, Inc., 773 F.3d 1201, 1226 (Fed. Cir. 2014) (“D-Link”), in addressing defendant’s infringement of Ericsson’s FRAND-committed SEPs with respect to the IEEE 802.11 standard, the Federal Circuit instructed that “the ultimate reasonable royalty award [is] . . . based on the incremental value that the patented invention adds to the end product.” (Emphasis added.) Thus, “licenses are generally negotiated [based on the selling price of the end product].” Id.

• In CSIRO, the Federal Circuit rejected Cisco’s argument that the SSPPU should be the royalty base, concluding that requiring such an approach would be “untenable” given the need for “adaptability.” 809 F.3d at 1303.

• In HTC, the district court held that the SSPPU was not required to be the royalty base, and also observed that industry practice is to use the entire cellphone as the royalty base. HTC Corporation v. Telefonaktiebolaget LM Ericsson, 2019 WL 126980, at *5 (E.D. Tex. Jan. 7, 2019) (“HTC 2”). On appeal, the Fifth Circuit found no error in the jury’s rejection of Cisco’s argument that the SSPPU was the proper royalty base. Slip op. at 12-13.

These FRAND holdings, rejecting use of the SSPPU as a required royalty base, are consistent with other Federal Circuit cases that did not involve SEPs. For example:

• In Exmark Mfg. Co. v. Briggs & Stratton Power Prods Group, LLC, 879 F.3d 1332, 1349 (Fed. Cir. 2018), the Court explained that the entire product may be used as a royalty base if doing so “is consistent with the realities of a hypothetical negotiation and accurately reflects the real-world bargaining that occurs, particularly in licensing.” The Court also noted that “sophisticated parties routinely enter into license agreements that base the value of the patented invention on a percentage of the commercial products’ sales price.” Id.

• See also Sprint Comm’n’s. Co., LP v. Time Warner Cable, Inc., 760 Fed. Appx. 977, 983 (Fed. Cir. 2018) ("We have explained that otherwise comparable licenses are not inadmissible solely because they express the royalty rate as a percentage of total revenues, rather than in terms of the smallest saleable unit").

Comparable Licenses

The Section 6.1’s limitation on comparable licenses as a basis for determining a reasonable royalty where the licenses were “obtained under the explicit or implicit threat of an injunction” is not consistent with caselaw. Every patent license is negotiated under the shadow of the law, which includes a patentee’s right to seek and in the appropriate circumstances be granted, an injunction.

This puts the IEEE policy’s approach at direct odds with long established legal authority holding that the “best measure” of a reasonable royalty are previously established royalties for the same portfolio and comparable licenses. This holds for both reasonable patent royalties generally, and specifically in the context of royalties for SEPs.

• In Apple Inc. v. Motorola, Inc., 757 F.3d 1286, 1325-26 (Fed. Cir. 2014), in the FRAND context, the Federal Circuit reiterated that “[a]s we have held many times, using sufficiently comparable licenses is a generally reliable method of estimating the value of a patent.” And, whether licenses are sufficiently comparable goes to the weight of the evidence.
D-Link illustrates the reliance on a SEP holder’s prior licenses to determine FRAND damages. There, the Federal Circuit rejected the defendant’s objection to the district court’s allowance of prior Ericsson licenses that used the end product price as the royalty base. The Court rejected D-Link’s argument that this violated the Entire Market Value Rule. 773 F.3d at 1226-27.

In HTC, Ericsson presented evidence in the district court of licenses it had with similarly situated companies to HTC that had terms “remarkably” similar to those offered to HTC. HTC countered with an SSPPU argument, and evidence of more favorable licenses from Ericsson to Apple, Samsung, and Huawei. The Fifth Circuit found no error in the jury’s reliance on Ericsson’s prior licenses, commenting that the jury was not obligated to accept HTC’s evidence or argument. Slip op. at 16.

See also Faulkner v. Gibbs, 199 F.2d 635, 638 (9th Cir. 1952) (an “established royalty” is “the best measure of value”); United States Nat’l Bank of Portland v. Fabri-Valve Co. of Am., 235 F.2d 565, 568 (9th Cir. 1956) (“the primary method” for determining a reasonable royalty is “using the claimant’s established royalties”); accord Nickson Indus., Inc. v. Rol Mfg. Co., 318 F.2d 795, 798 (Fed. Cir. 1968) (affirming damages award of 8.8% of 41% of gross sales prices because it was the rate “paid by Nickson’s established licensees”).

As previously noted, the lower court in Unwired Planet also primarily relied upon a comparable license methodology, which the UK Supreme Court left unquestioned.

This is not to say that a court should rely on non-comparable licenses. ResQNet.com, Inc. v. Lancer, Inc. 594 F.3d 860, 871-73 (Fed. Cir. 2010); see also Microsoft, 795 F.3d at 1044 (portfolio of SEPs and non-SEPs are not comparable to SEP-only portfolio). Accordingly, including in the FRAND context, to bear on reasonableness of royalties, other patents and licenses must be shown to be technologically and economically comparable to those at issue. See, e.g., CSIRO, 809 F.3d at 1303-04; Microsoft Corporation v. Motorola, Inc, 795 F.3d 1024, 1043-44 (9th Cir. 2015); D-Link, 773 F.3d at 1227.

The IEEE policy’s current approach thus creates a limitation on determining reasonable royalties that is inconsistent with the “best measure” for determining a reasonable royalty. It is also entirely unadministrable because parties to a license negotiation or even when engaged in litigation are likely never to agree to which licenses were, and which were not, negotiated under even an implicit threat of an injunction. The IEEE Policy would thus breed disputes, and in some cases might effectively preclude reliance on all prior licenses, even when they are the best measure of value.

SECTION 6.2

Section 6.2’s limitations on the ability of SEP holders to seek or obtain injunctions are significant and run afoul of cases from around the world.

The Policy’s limitations effectively eliminate the opportunity for a SEP holder to even seek an injunction, much less obtain one in appropriate circumstances. This is contrary to the Federal Circuit’s Apple v. Motorola decision, which made clear that “[t]o the extent that the district court applied a per se rule that injunctions are unavailable for SEPs, it erred.” 757 F.3d at 1331.

European courts have held similarly.

On Sisvel Int’l S.A. v. Haier Deutschland GmbH, KZR 36/17 (May 2020) (Bundesgerichtshof, ¶ 169, the German court expressly held that a SEP holder that commits to offer a FRAND license is entitled to request an injunction.
The Court of Justice of the European Union in Huawei Technologies Co. Ltd v ZTE Corp., Case C-170/13 [2015] ¶ 71 held that an SEP holder may request an injunction if it has offered a FRAND license and the alleged infringer has not diligently responded in good faith and without delaying tactics.

In Unwired Planet, ¶¶ 166, 167, the UK Supreme Court held that injunctions must remain available to ensure an infringer has incentives to negotiate and ultimately accept a FRAND license, and monetary damages were no substitute because “implementers who are infringing would have the incentive to continue infringing until, patent by patent, and country by country, they were compelled to pay royalties.”

In Samsung Elecs. Co. v. Apple, Case 2011 Gahap 39552 (Seoul Dist. Ct. Aug. 24, 2012), the court in Korea granted an injunction, rejecting the argument that an injunction was unavailable in the case of a FRAND-encumbered patent.

Courts throughout the world have also recognized the appropriateness of injunctions where implementers engage in “hold out” during negotiations. The IEEE Policy’s requirement of at least a first level appellate determination before a SEP holder could even seek an injunction creates asymmetry between rights of SEP holders and implementers that incentivizes hold out conduct by implementers. Thus:

In Unwired Planet, ¶¶ 4, 10, 14, the UK Supreme Court’s decision regarding the availability of injunctions expressly recognized the need to balance the rights of SEP holders and implementers by considering hold out conduct, as well as hold up conduct and that requiring multi-jurisdictional litigation would improperly incentivize hold out by implementers contrary to rights of SEP holders. The Court also cited with approval two decisions by German courts granting injunctions in light of hold out conduct by implementers: Pioneer v. Acer, 7 O 96/14, ¶ 119 (Regional Court Mannheim) (Jan. 8, 2016) (defendant’s counter-offer was not FRAND and it was enjoined from infringing); St. Lawrence v. Vodaphone, 4a 073/14, ¶ 64 (District Court Dusseldorf) (March 31, 2016) (defendant’s untimely counter-offer to worldwide FRAND license offer exposed it to an injunction).

In Sisvel v. Wiko, (Regional Court, DE Landesgericht (LG) of Mannheim, Case No. 7 0 115/16, Sept. 4, 2019) a German court held that defendant infringed and was assessed infringement damages. In addition, the court enjoined defendant’s infringing conduct, finding that defendant’s refusal to sign an NDA was evidence of an intent not to negotiate a license and was an act of bad faith.

In Philips v. ASUS (NL, Court of Appeal of the Hague, Case No. 200.221, 250/01, May 7, 2019) the court reversed the denial of an injunction in favor of Philips by the lower court, finding that Philips had offered an SEP license in compliance with the first step of Huawei v. ZTE, but that ASUS engaged in “hold out” activity by delaying license negotiations, including by failing to retain a technical expert to evaluate Philips’ patent portfolio and repeatedly by requesting Philips to explain technical issues on the patents in suit.

In TQ Delta v. ZyXel Communications, [2019] EWHC (Pat), March 18, 2019, defendants were held to have engaged in “hold out” where SEPs in suit would expire in several months and before the issue of taking a license on FRAND terms could be settled by the court, and ZyXel consistently changed its position on whether they would take a license on FRAND terms. The court found this conduct to be intentional and concluded that depriving patentee of an injunction would be unjust.

Most recently, in Optis Cellular Technology LLC v. Apple Retail UK Limited [2021] EWHC 1721 (Pat), June 25, 2021, the High Court in addressing Apple’s secondary case challenging whether Optis was estopped from asserting its SEP, said that even if Apple were to prevail on its claim, the relief it
sought to prevent Optis from obtaining an injunction to enforce its SEP would be disproportionate to Optis' claimed violation.

• In Apple v. Motorola, the Federal Circuit identified the same circumstances where an injunction may be appropriate – i.e., where an infringer unilaterally refuses a FRAND royalty or unreasonably delays negotiations to the same effect. 757 F.3d at 1332. See also Core Wireless Licensing S.A.R.L. v. LG Electronics, Inc., 2016 WL 107498825 (E.D. Tex. Nov. 2, 2016) (in non-SEP context, granting enhanced damages in favor of plaintiff based on defendant's "hold out" conduct evidenced by its preference to litigate rather than negotiate on the merits, i.e., other than on the strength of its non-infringement and invalidity defenses).

The IEEE's policy contravenes not only the holdings of these cases, but also their recognition that the availability of injunctive relief requires consideration of and a balancing of the interests of both SEP holders and implementers. The right to seek an injunction is afforded all patent holders by the U.S. Patent Act, 35 U.S.C. § 283. The right is also Constitutionally protected by the First Amendment right to petition government. Injunctions also are equitable in nature, and for purposes of U.S. law, whether one should issue depends on the traditional equitable factors reaffirmed in eBay v. MercExchange LLC, 547 U.S. 388 (2006), which requires Courts to balance the parties' interests, for present purposes those being of a holder of an Essential Patent Claim and an infringing implementer of an IEEE standard. Even the recently amended Patent Act in Germany, which was intended to avoid the automatic grant of injunctions while infringement proceedings were in progress, adopts a proportionality approach, thus leaving the door open for a SEP holder to seek an injunction and to obtain one where the relief would be proportionate to the unlawful infringement, which certainly would be the case where an implementer engaged in hold-out conduct. Thus, the existing system in the US and globally allows for safeguards, particularly for parties who act in good faith and do not hold out. None of those factors involve any requirement for a patent holder to forgo even seeking an injunction until it has exhausted at least a first level of appellate review, as is required by Section 6.2. Moreover, Section 6.2 fails to accommodate any balance of interests between those of Essential Patent Claim owners and implementers, putting a thumb on the scale squarely in favor of the only the latter. This provision thus ignores the growing number of cases that recognize that injunctions may be entirely appropriate to counter "hold out" conduct by implementers.

EFFECT OF 2015 POLICY CHANGES ON THE DESIREABILITY OF IEEE AS A FORUM FOR NEW STANDARDIZATION PROJECTS

As one of the two largest contributors to IEEE 802.11, Qualcomm wants IEEE to succeed, but has been enormously frustrated by the insistence on the structural imbalance the 2015 patent policy created and is hopeful that sensible change is afoot. Qualcomm publicly stated in 2015 that it would not give licensing commitments under the 2015 IEEE IPR Policy, and in the six years since it has not. Because the 2015 Policy changes were so tilted towards implementers and directed to reducing the value of technology contributed to IEEE standards, Qualcomm no longer considers the IEEE a desirable forum for the standardization of new technologies, whether they be for vehicle interoperability, AI, VR, or any other technology.

Indeed, because the 2015 Policy purports to be a “FRAND-based” policy while in fact devaluing patents subject to its licensing commitment, it puts the IEEE in a “no mans land” where neither implementors nor innovators will have IEEE among their first choices for standardizing new technologies. Implementers will favor pure royalty free options, similar to the Bluetooth Forum or AOM Media, whenever such efforts are viable. And where valuable patented technology must inevitably become part of a standard, then the innovators who own the patents of that technology will favor SDOs with mainstream FRAND policies that do not have the anti-patent features added to the IEEE policy in 2015.
Comments regarding the ongoing use of the Custom LOA form under this option:

<table>
<thead>
<tr>
<th>The use of the Custom LOA permitting commitments under the 2007 IEEE Policy under this option should be maintained for the same reasons it was originally implemented.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Moreover, the BoG and the IEEE SA should strongly consider making the Optional Form an option for all IEEE Standards regardless of the date the PAR was approved. At this point, IEEE is publishing standards for which it has received negative LOAs from significant patent holders. Thus, companies with patents essential to IEEE standards have little incentive to give IEEE licensing commitments other than to reassure the industry of their intentions. There are companies – like Qualcomm – that have been willing to give commitments under the 2007 IPR Policy but not under the 2015 Policy. Although such companies might want to reassure the industry of their intentions, given a choice between providing such reassurances outside of the IEEE (or not at all) or giving a commitment under the 2015 Policy, many companies – including Qualcomm – choose the former. This is the worst of all worlds for IEEE because it does not have the benefit of having obtained at least a commitment under the 2007 Policy, and instead has approved a standard with significant negative LOAs. Allowing standards to be approved with a commitment under the 2007 Policy is no worse than allowing them to be approved with a negative LOA, and is in many ways better for IEEE, its members, and the public.</td>
</tr>
</tbody>
</table>

**Option ii(a): Remove all of the Patent Policy provisions regarding Prohibitive Orders**

**Pros:**

Removing the prohibition on Prohibitive Orders would bring the IEEE IPR Policy back in line with other SDO IPR policies that purport to request commitments to license on FRAND terms and in line with the way FRAND commitments are being interpreted and applied by courts around the world. For details on how the IEEE policy conflicts with legal interpretations of FRAND, see our response to Option i.

If both the changes in Option ii were made, it would significantly increase the likelihood of IEEE being seen as an appropriate venue for future standards development by innovators as well as increase the likelihood that innovators would be willing to give commitments under the Policy. This would particularly be true if other issues, such as a reference (in the definition of Compliant Implementation) to any “portion” of a “normative clause,” were also addressed.

**Cons:**

Making only this change would leave the Policy in significant conflict with legal interpretations of FRAND regarding reasonable rate (see our response to Option i) as well as leaving untouched other troubling issues, including references to any “portion” of a “normative clause”.

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Commenting on the use of the Custom LOA form under this option:

The use of the Custom LOA permitting commitments under the 2007 IEEE Policy under this option should be maintained for the same reasons it was originally implemented.

Moreover, the BoG and the IEEE SA should strongly consider making the Optional Form an option for all IEEE Standards regardless of the date the PAR was approved. At this point, IEEE is publishing standards for which it has received negative LOAs from significant patent holders. Thus, companies with patents essential to IEEE standards have little incentive to give IEEE licensing commitments other than to reassure the industry of their intentions. There are companies – like Qualcomm – that have been willing to give commitments under the 2007 IPR Policy but not under the 2015 Policy. Although such companies might want to reassure the industry of their intentions, given a choice between providing such reassurances outside of the IEE (or not at all) or giving a commitment under the 2015 Policy, many companies – including Qualcomm – choose the former. This is the worst of all worlds for IEEE because it does not have the benefit of having obtained at least a commitment under the 2007 Policy, and instead has approved a standard with significant negative LOAs. Allowing standards to be approved with a commitment under the 2007 Policy is no worse than allowing them to be approved with a negative LOA, and is in many ways better for IEEE, its members, and the public.

Option ii(b): Remove all optional factors included in the definition of Reasonable Rate

Pros:

Removing the provisions listing Reasonable Rate factors would bring the IEEE IPR Policy back in line with other SDO IPR policies that purport to request commitments to license on FRAND terms and in line with the way FRAND commitments are being interpreted and applied by courts around the world. For details on how the IEEE policy conflicts with legal interpretations of FRAND, see our response to Option i.

If both the changes in Option ii were made, it would significantly increase the likelihood of IEEE being seen as an appropriate venue for future standards development by innovators as well as increase the likelihood that innovators would be willing to give commitments under the Policy. This would particularly be true if other issues, such as the references to “portions” of “clauses,” were also addressed.

Cons:

Making only this change would leave the Policy in significant conflict with legal interpretations of FRAND regarding injunctions (see our response to Option i) as well as leaving untouched other troubling issues, including references to any “portion” of a “normative clause” in the definition of Compliant Implementation.
Comments regarding the ongoing use of the Custom LOA form under this option:

The use of the Custom LOA permitting commitments under the 2007 IEEE Policy under this option should be maintained for the same reasons it was originally implemented.

Moreover, the BoG and the IEEE SA should strongly consider making the Optional Form an option for all IEEE Standards regardless of the date the PAR was approved. At this point, IEEE is publishing standards for which it has received negative LOAs from significant patent holders. Thus, companies with patents essential to IEEE standards have little incentive to give IEEE licensing commitments other than to reassure the industry of their intentions. There are companies – like Qualcomm – that have been willing to give commitments under the 2007 IPR Policy but not under the 2015 Policy. Although such companies might want to reassure the industry of their intentions, given a choice between providing such reassurances outside of the IEEE (or not at all) or giving a commitment under the 2015 Policy, many companies – including Qualcomm – choose the former. This is the worst of all worlds for IEEE because it does not have the benefit of having obtained at least a commitment under the 2007 Policy, and instead has approved a standard with significant negative LOAs. Allowing standards to be approved with a commitment under the 2007 Policy is no worse than allowing them to be approved with a negative LOA, and is in many ways better for IEEE, its members, and the public.

Option iii: Offer more options than before by: Allowing an LOA filer the ability to choose whether it may seek or not seek Prohibitive Orders in accordance with the current wording of the Patent Policy; and Clarifying the optionality of the factors included in the definition of Reasonable Rate.

Pros:

Stripping the provisions of issue of legal effect either by allowing submitters to opt out or by some kind of clarification would bring the IEEE IPR Policy closer to other SDO IPR policies that purport to request commitments to license on FRAND terms and in line with the way FRAND commitments are being interpreted and applied by courts around the world. For details on how the IEEE policy conflicts with legal interpretations of FRAND, see our response to Option i.

Cons:

Retaining provisions in the policy that are written in such a way as to suggest they are legally binding requirements but are actually intended to have no effect will inevitably lead to disputes and litigation issues. No rational company – including implementer companies that happen to give IEEE commitments – would agree to the prohibition on injunctions in the current Policy if it had the option not to. Similarly, it is hard to imagine an innovator company being comfortable with a listing of only one-sided factors to consider in determining reasonable rate, no matter how clear the language is that those factors are optional.
The use of the Custom LOA permitting commitments under the 2007 IEEE Policy under this option should be maintained for the same reasons it was originally implemented, given the limited nature of this proposed change.

Moreover, the BoG should strongly consider making the Optional Form an option for all IEEE Standards regardless of the date the PAR was approved. At this point, IEEE is publishing standards for which it has received negative LOAs from significant patent holders. Thus, companies with patents essential to IEEE standards have little incentive to give IEEE licensing commitments other than to reassure the industry of their intentions. There are companies – like Qualcomm – that have been willing to give commitments under the 2007 IPR Policy but not under the 2015 Policy. Although such companies might want to reassure the industry of their intentions, given a choice between providing such reassurances outside of the IEEE (or not at all) or giving a commitment under the 2015 Policy, many companies – including Qualcomm – choose the former. This is the worst of all worlds for IEEE because it does not have the benefit of having obtained at least a commitment under the 2007 Policy, and instead has approved a standard with significant negative LOAs. Allowing standards to be approved with a commitment under the 2007 Policy is no worse than allowing them to be approved with a negative LOA, and is in many ways better for IEEE, its members, and the public.
Option i: No change to the text of the 2015 Patent Policy

Pros:

The 2015 Patent Policy captures several terms that are critical for balancing the interests of contributors to a standard and other members of the innovating public, who, because of the effect of standardization, are precluded from switching to alternative technologies in response to either inflated royalty demands or the threat of Prohibitive Orders. The 2015 Patent Policy achieves this balance by acknowledging the important difference between contributors to a standard and exclusive owners of proprietary technology. Innovators who seek to standardize their technologies have concluded that the benefits of universal implementation outweigh the benefits of exclusive or even limited use. Innovators who do not seek to standardize their technologies have reached the opposite conclusion. But innovators who seek to standardize their technologies and yet retain the privileges of exclusive ownership—i.e., inflated royalties and Prohibitive Orders—seek the benefits of both standardization and exclusivity. That is an abuse of the standardization process and does nothing but yield undeserved windfalls to a contributor, the value of whose technology is immediately and artificially inflated by being immediately and artificially insulated from the pricing constraints of alternatives as a result of standardization. The 2015 Patent Policy safeguards against these and other inefficient and inequitable results and should be maintained in full force.

Cons:

The 2015 Policy Patent Policy is a key benefit to IEEE standardization work. There are no "cons" in maintaining it.

Comments regarding the ongoing use of the Custom LOA form under this option:

For standards projects that commenced after March 15, 2015 (the 2015 Patent Policy's effective date), all IEEE participants' participation in standards development should be governed by the same rules, and the custom LOA form (which was designed to keep existing rules in place for older projects) should not be used.

Option ii(a): Remove all of the Patent Policy provisions regarding Prohibitive Orders

Pros:

While we do not see any meaningful benefits to removing the Patent Policy’s text regarding Prohibitive Orders, any theoretical benefit would be overwhelmingly outweighed by the benefits of maintaining the current Policy across all geographies.
Removing the provisions regarding Prohibitive Orders would undermine the core benefits and protections provided by the 2015 Patent Policy. Contributors who seek standardization through SSO action by definition seek to effect the broadest possible use of their technical contributions. They may lose royalties as a result of another’s infringement, but they do not suffer lost sales. Consequently, these contributors cannot even benefit from Prohibitive Orders used for their intended purpose—namely, to protect against lost sales from someone else’s infringement. Instead, contributors to standardization benefit from Prohibitive Orders only as an abusive tactic to obtain higher (non-(F) RAND) royalties, not a legitimate remedy. For these contributors, the sole purpose of a Prohibitive Order is immediately to sell it back to the adjudicated infringer for money in the form of a royalty. And that royalty is wildly inflated because (1) the royalty base is now the entire article of manufacture, which often comprises tens of thousands of innovations unrelated to the patent practicing component; and (2) the royalty rate is negotiated often when sunk costs are high and alternatives are few as a result of the artifact of standardization. Keeping the provisions relating to Prohibitive Order in full force is critical to IEEE standardization and protection of the IEEE ecosystem.

Comments regarding the ongoing use of the Custom LOA form under this option:

For standards projects that commenced after March 15, 2015 (the 2015 Patent Policy’s effective date), all IEEE participants’ participation in standards development should be governed by the same rules, and the custom LOA form (which was designed to keep existing rules in place for older projects) should not be used.

Option ii(b): Remove all optional factors included in the definition of Reasonable Rate

Pros:

While we do not see any meaningful benefits to removing the Patent Policy’s text regarding Reasonable Rates, any theoretical benefit would be overwhelmingly outweighed by the benefits of maintaining the current Policy across all geographies.

Cons:

Removing the provisions regarding optional factors in the definition of a Reasonable Rate would undermine two of the key benefits of the 2015 Patent Policy—namely, to ensure that contributors are not compensated for the innovations of others and, even then, are not overcompensated for their own contributions. As such, we do not support this option in any manner.

Comments regarding the ongoing use of the Custom LOA form under this option:

For standards projects that commenced after March 15, 2015 (the 2015 Patent Policy’s effective date), all IEEE participants’ participation in standards development should be governed by the same rules, and the custom LOA form (which was designed to keep existing rules in place for older projects) should not be used.
Option iii: Offer more options than before by: Allowing an LOA filer the ability to choose whether it may seek or not seek Prohibitive Orders in accordance with the current wording of the Patent Policy; and Clarifying the optionality of the factors included in the definition of Reasonable Rate.

**Pros:**

While we do not see any meaningful benefits to making the text regarding Prohibitive Orders optional, any theoretical benefit would be overwhelmingly outweighed by the benefits of maintaining uniformity across contributor commitments. Likewise, we see no need to further clarify the optionality of the Reasonable Royalty factors.

**Cons:**

Allowing contributors to choose whether to seek Prohibitive Orders would defeat the benefits of the 2015 Patent Policy and enable abusive behavior. Further clarifying optional factors for determining a Reasonable Rate is unnecessary as the factors are already clearly identified as optional.

**Comments regarding the ongoing use of the Custom LOA form under this option:**

For standards projects that commenced after March 15, 2015 (the 2015 Patent Policy's effective date), all IEEE participants' participation in standards development should be governed by the same rules, and the custom LOA form (which was designed to keep existing rules in place for older projects) should not be used.
Option i: No change to the text of the 2015 Patent Policy

Pros:

The IEEE Patent Policy as written reflects a balance between patent holder and implementer concerns. As a patent holder AND implementer that seeks to grow standards and does not seek to maximize its returns of SEPs in violation of FRAND principles, we have found the policy to be well balanced.

Cons:

I am not sure there are Cons. Can a fair policy have Cons?

Comments regarding the ongoing use of the Custom LOA form under this option:

The custom LOA form, as with any such form, should seek information relative to whether or not a patent should be included in an IEEE standard or excluded. Requesting optional additional information is commendable although large patent holders generally will not offer any - transparency helps identify abuses of FRAND as practiced by patent monetizing companies.

Option ii(a): Remove all of the Patent Policy provisions regarding Prohibitive Orders

Pros:

None. This only serves to move backwards and perpetuate FRAND abuses using various methods to gain leverage over a potential patent licensee and overly inflate patent costs.

Cons:

Only in rare cases should a Prohibited Orders not be included/applied.

Comments regarding the ongoing use of the Custom LOA form under this option:

How the form is completed would be reevaluated if Prohibitive Order language were removed from the Patent Policy. Less information would be provided.
Option ii(b): Remove all optional factors included in the definition of Reasonable Rate

Pros:
It is optional - so no Pro's with removal. Removal suppresses an easy path to transparency which is badly needed.

Cons:
It makes no sense to remove the Optional Factors. More transparency, not less, in an easy format is needed. The sections are optional, so anyone arguing against these factors is doing so in an attempt to move IEEE policy backwards, not forward.

Comments regarding the ongoing use of the Custom LOA form under this option:
If Optional Factors are NOT removed, we will continue to use the sections.

Option iii: Offer more options than before by: Allowing an LOA filer the ability to choose whether it may seek or not seek Prohibitive Orders in accordance with the current wording of the Patent Policy; and Clarifying the optionality of the factors included in the definition of Reasonable Rate.

Pros:
This reads as an "accommodation solution" that is not good for IEEE as a standards body. Prohibitive Orders should only be allowed in a very limited circumstance regarding SEPs. If you understand how the Protective Orders are used to creative leverage and obtain non-FRAND rates, IEEE would never consider removing the language. And there is no reason to define "Optional" further. Optional means Optional - ask any judge.

Cons:
Srr pros, above.

Comments regarding the ongoing use of the Custom LOA form under this option:
Allowing the protective Order language to be changed is a "watering-down" of the values for which IEEE stands. Fairness in the treatment of SEPs is key. Perhaps if these changes are made, and a company indicates it may seek protective orders, the IEEE policy should be further amended to indicate that a "seek protective orders" also means the patent will be included in the standard only as a last resort. Naturally, this would slow down the standards process which is not good but this would also keep the balance the policy, as it stands, fair to patent holders and implementers.
Option i: No change to the text of the 2015 Patent Policy

Pros:

Public Knowledge believes that the current 2015 IEEE-SA Patent Policy is in the best interests of consumers and the changes contemplated would be unwise at this time. Many of the products and devices consumers use every day make use of IEEE standards. When consumers stream a TV show or even access the internet, IEEE standards are implicated. This is especially true of emerging markets like electric vehicles and the Internet of Things (IOT). Any changes to the 2015 Patent Policy must take into account the effect on consumers.

Consumers benefit from markets free of gatekeepers. The best, most innovative products should win out in a market. Standards lower barriers to entry and enable competition. When companies vigorously compete, consumers win. Distortions of the market can create artificial scarcity and mean consumers can pay higher prices for fewer choices than they would have in a competitive market.

Standard essential patents (SEPs) also benefit interoperability—a cornerstone pro-consumer policy. We all benefit when our devices can “talk” to one another, and that requires reliable and consistent standard-setting. Under an interoperability regime, digital gatekeepers must open their gates so the best and cheapest products win out.

The 2015 IEEE-SA Patent Policy created a proper balance for consumers where companies have the incentive to innovate, not dominate, markets. No change is warranted at this time.

Clarity: Businesses need clear knowledge of patent issues if they want to effectively compete. Among other things, the 2015 update clarified the narrow set of circumstances when SEP holders can employ prohibitive orders against someone using an IEEE-SA standard, reiterated that the RAND commitment required SEP holders to license to all willing licensees, and provided guidance on what “reasonable” means in the context of royalty analysis. It has demonstrably reduced SEP licensing-related abuses, deterred unnecessary and burdensome litigation, and supported ingenuity in the market. Litigation can be burdensome and costly for all parties involved, and many times those costs are simply passed on to consumers. Clear and stable standards can prevent this. Consumers have reaped the benefits of this clarity and upsetting the balance offered by the 2015 update should not be done lightly.

Need for SSOs Given Qualcomm: The recent 9th Circuit decision in Federal Trade Commission vs. Qualcomm has called into question the role of antitrust in SEP disputes. Under that decision, the 9th Circuit found that Qualcomm’s clear violations of its FRAND commitments with its chips did not give
rise to antitrust liability. Under this ruling, many companies that want to make use of FRAND patents, but are denied reasonable terms, may have no remedy at all. This purposeful narrowing is part of a broader trend of narrowing antitrust law throughout with the federal courts. Plaintiffs face increasing burdens of proof with onerous hurdles to make out a cognizable claim. Given that the courts have become an unfriendly forum to litigate FRAND disputes, there is more importance than ever with standard-setting organizations like the IEEE.

SEP holders must have a place to be held accountable or we risk a market where the holders can renege on their FRAND commitments with little consequence. A strong policy like the 2015 IEEE Patent Policy is thus essential for SEP users to ensure fairness in these markets. If the federal courts won’t hold companies that make FRAND commitments to their word, it is essential that SSOs like the IEEE step in. A weakening of the 2015 standard would endanger competition in technology markets at a critical juncture for consumers.

Participation: The 2015 Patent Policy was supported by clear majorities of IEEE-SA stakeholders. Multiple levels of IEEE governance strongly supported the changes. The 2015 Policy is not just popular with the IEEE of yesteryear, but with the general public as well. The 2015 changes have resulted in greater technical contributions to IEEE standards. After two years of declining technical contributions to IEEE-SA standards in 2013 and 2014, total contributions rebounded after the new policy was enacted in 2015 and IEEE-SA had a record number in 2017. Taking into account a wider array of contributions from a diverse range of stakeholders should result in superior standards. Consumers stand to benefit from standards with a wider array of input, and changes to the 2015 policy might jeopardize further contributions.

By contrast, the evidence is clear that the public arguments made against the IEEE’s updated policy are without merit. The updates have had no negative effects on participation or contributions of patented technology to IEEE-SA standards and they helped ensure that IEEE’s Standardization Association continues to deliver on its mission. The IEEE-SA should put its mission and the Wi-Fi ecosystem first and reject the self-serving demands of a few patent profiteers.

Cons:

Changing the 2015 IEEE-SA Patent Policy would not provide any meaningful benefits. Undoing the clarifications made to the Patent Policy in 2015 would simply enable the same SEP abuses (and negative impacts of that abuse) that IEEE-SA has already recognized and taken successful steps to prevent.

Comments regarding the ongoing use of the Custom LOA form under this option:

Use of the Custom LOA for IEEE-SA projects initiated prior to March 2015 can be supported. Use of the Custom LOA should not be permitted for other projects, since all parties involved would have been aware of the terms of the IEEE-SA Patent Policy when joining such projects.
Option ii(a): Remove all of the Patent Policy provisions regarding Prohibitive Orders

Pros:

Removing the 2015 IEEE-SA’s Patent Policy provisions regarding prohibitive orders (injunctions) lacks meaningful benefits and should be avoided. Injunctions in a SEP context should be a remedy of absolute last resort and granted in only the rarest of circumstances. In committing its patents to a standard, an SEP holder has shown that it is willing to take monetary compensation for use of its patents. In some cases, committing a patent to a standard is what makes it valuable in the first place. The growing number of enforcement actions by competition regulators around the globe for SEP abuses clearly indicates that SEP holders will attempt to do all they can to use their grant of a standard as a way to throttle competition. The IEEE-SA should not partake in this attempt.

Cons:

In the context of SEPs, prohibitive orders (injunctions from a district court or exclusion orders from the International Trade Commission) are the opposite of licensing. Their only purpose – except in rare circumstances (e.g. a patent user that has stated it is unwilling to pay any amount, even a reasonable fee) – is to hold up those who build or rely on IEEE-SA standards and to pressure those same innovators to agree to supra-FRAND SEP licensing terms. The current IEEE-SA Patent Policy appropriately recognizes this, and fairly balances the patent owner’s ability to seek FRAND compensation against the implementer’s ability to be free from improper “market exclusion” tactics.

As companies struggle to deal with SEP holders freed to seek injunctions whenever they wish, it is consumers who stand to lose. Some SEP holders could become gatekeepers, only allowing companies to license their patents (necessary to compete in the market) if they do not pose a competitive threat. Consumers will be the ones left paying these artificially inflated prices and dealing with the lack of innovation that will result.

Comments regarding the ongoing use of the Custom LOA form under this option:

Use of the Custom LOA for IEEE-SA projects initiated prior to March 2015 can be supported. Use of the Custom LOA should not be permitted for other projects, since all parties involved would have been aware of the terms of the IEEE-SA Patent Policy when joining such projects.

Option ii(b): Remove all optional factors included in the definition of Reasonable Rate

Pros:

IEEE-SA’s current 2015 Patent Policy provides much needed guidance on what a reasonable rate is in the context of the FRAND commitment (that a reasonable rate for a valid, infringed, and enforceable FRAND-encumbered SEP should be based on the value of the patented invention itself, rather than its inclusion in the standard, real or hypothetical uses of the standard at the end of a value chain, etc.). Without FRAND commitments, the only workable alternative would be for standards-setting organizations to set fees directly. The certainty provided by the IEEE-SA’s clarification of the responsibilities of companies that participate in standards-setting has been good for businesses and good for consumers.
The IEEE-SA Patent Policy currently provides appropriate clarity and predictability for FRAND licensing. Losing or reducing that clarity would have only negative effects, and would enable SEP owners to engage in abusive holdup and achieve supra-FRAND royalty terms. Since 2015, IEEE-SA’s Patent Policy has significantly contributed to avoiding two well-established, and deleterious effects: royalty stacking, when the cumulative demands for SEP licenses cascade to make accepting them economically unviable; and patent holdup, where a SEP holder demands supra-FRAND royalties or (other unreasonable requirements) from potential users of the standard, preventing licensing.

**Comments regarding the ongoing use of the Custom LOA form under this option:**

Use of the Custom LOA for IEEE-SA projects initiated prior to March 2015 can be supported. Use of the Custom LOA should not be permitted for other projects, since all parties involved would have been aware of the terms of the IEEE-SA Patent Policy when joining such projects.

**Option iii: Offer more options than before by:** Allowing an LOA filer the ability to choose whether it may seek or not seek Prohibitive Orders in accordance with the current wording of the Patent Policy; and Clarifying the optionality of the factors included in the definition of Reasonable Rate.

**Pros:**

Neither of these options will result in benefits to consumers.

**Cons:**

As explained in previous responses, injunctions should be only very rarely granted in SEP disputes. In general, injunctions (and especially pre-trial injunctions) are not appropriate when there is no irreparable injury to the patent holder, and if the patent holder has committed to accepting a reasonable royalty, there likely cannot be. Thus, we would not support any expansions of their use. In addition, the factors included in the "Reasonable Rate" definition are already sufficient and no changes are warranted at this time. The IEEE-SA Patent Policy is already very clear that the optional factors included in the definition of “Reasonable Rate” are, in fact, optional. There is no need to seek further changes to the Patent Policy to clarify what is already clearly stated. Consumers are already well-served by the current policy, so no changes are warranted at this time.

**Comments regarding the ongoing use of the Custom LOA form under this option:**

Use of the Custom LOA for IEEE-SA projects initiated prior to March 2015 can be supported. Use of the Custom LOA should not be permitted for other projects, since all parties involved would have been aware of the terms of the IEEE-SA Patent Policy when joining such projects.
Option i: No change to the text of the 2015 Patent Policy

Pros:

| The 2015 Policy followed the revision process and was voted on. Some objections were addressed. Problems exist in that revised Policy. |

Cons:

| While it is not optimal to frequently make major changes to operational rules (pro for not changing 2015 Policy), in this case the problems arising from the 2015 Policy warrant review (con). IEEE should address the concerns of balancing party interests and of promoting support of SEP disclosure and RAND licensing by SEP holders and implementers. The recent history regarding LOAs (and negative LOAs) suggests that a proper balance was not found in the 2015 Policy. |
| As recognized in the questions here, two main issues were (a) the effective preclusion of injunctive relief (labelled as "Prohibitive Orders" which carries an inference of "excessive" or "repressive") and (b) "Reasonable Rate definition" factors that favor, or are legitimately believed to favor, implementers. It would be wise for IEEE to reconsider the March 15, 2015 Policy and, if revision is considered, a drafting team with diverse (opposing) interests and with some patent practitioners with experience in patent law and patent consequences, should be formed. |
| Importantly, consistency and predictability are important for standards policy in general and the IEEE Policy in particular. When the Policy and its enforcement oscillate between extremes, standards participants are unable to plan and trust the system. Which camp has sway or which party is in office should not result in pendular swings as we have seen in recent years. A fair balanced procedure provides the stability that enables standards to thrive and businesses to benefit. |
**Comments regarding the ongoing use of the Custom LOA form under this option:**

It is understood that the 2019 Custom LOA was drafted in response to SEP holders indicating they would provide an assurance under the Prior 2007 Policy and not under the 2015 Policy. Accordingly, the "Reasonable Rate" definition and the "Prohibitive Order" text (2015 change) are not included in the Form which may be used for standards efforts prior to March 15, 2015. By helping avoid an "ex post facto" setting, where parties joining a pre-2015 standards effort find themselves bound to new March 15, 2015 terms, the Custom LOA is useful. That is, if you start a ballgame with one set of rules, they should not be changed in the 6th inning and forceably imposed on the participating teams.

A few small items of bookkeeping. First there are two LOAs dated from June 2019, the regular LOA on June 1 and the Custom Limited LOA on June 19. It is proposed that the title of each distinguish the forms -- e.g. "Custom LOA..." and "March 15 LOA". Second, might it be helpful to include a cite in the Custom Form to the Prior (2007) Policy and definitions?

More substantively, the Custom LOA does not include an option for "not offering a RAND license." Without trudging through the FAQs, it might be helpful to briefly advise the Submitter of this and the implications of selecting the Custom LOA. It is noted that IEEE will not "coerce" holders of identified potential SEPs to submit an LOA. Having a clear, balanced policy and LOA better assures disclosure and assurance.

It is proposed to include a simple statement in the Custom LOA regarding "reciprocity" in that "Reciprocal Licensing" is deleted from the Custom LOA. This vital aspect of licensing should be addressed. A statement is proposed: "Reasonable terms may include reasonable reciprocity involving a license back from the Applicant to the Submitter. IEEE does not define license reciprocity for the Custom LOA."

The Letters of Assurance include a statement in the Signature section that users and implementers may enforce the terms of the IEEE Policy. It is appreciated that failure by a committing SEP holder to comply with its RAND assurance can impact a user or implementer, and that the interests of these parties may not be represented by other SDO members or IEEE. That is understood. However that provision in the Signature section also includes an "acknowledgement" or admission by the SEP holder/signatory "that users and implementers...are relying and will rely upon the terms of this LOA."

Some have offered a "reliance" theory for standards enforcement, but this text is overloaded. It could give rise to causes of action in which "reliance" is an element, where there may, in fact, be no reliance or knowledge of the LOA by the asserting implementer! A statement that users and implementers "may reasonably rely" is not as patent-unfriendly, but helps establish implementer rights. For IEEE Policy to work, it should not appear that a thumb is on the scale.
Option ii(a): Remove all of the Patent Policy provisions regarding Prohibitive Orders

Pros:

The right to exclude infringers is a vital aspect of the patent. Standards participants, when joining an IEEE standards effort, should understand that a RAND assurance means that the right to exclude for assured SEPs is less available (than if there were no RAND assurance). An implementer ready and willing to negotiate in good faith and take a license on RAND terms offered by a SEP holder should not be subject to injunction or exclusion order, or related remedies. On the other hand, when an implementer demonstrably defies RAND licensing and negotiations when a SEP holder is acting in good faith, injunctive relief ought not be foreclosed. If an implementer is not following RAND rules, is it balanced or sound to force the participating SEP holder to be held to RAND rules?

The 2015 Policy imbalance on "injunctive relief" is exacerbated by the "Reasonable Rate" factors which, as noted section ii(b), is the right cross following the left hook. After precluding injunctive relief, the 2015 Policy includes "should be considered" factors that drive down royalty ranges! IEEE should look for serious balance to promote innovation in its standards, to promote participation in standards development, to promote disclosure of essential patents (claims), to promote uneventful licensing, and to not disrupt a court's precedents or alternatives in assessing reasonable royalties. The Policy should, importantly, be clear so that signatories know their rights and obligations without resort to supplementary explanatory documents.

A further fact is in play regarding SEP injunction. A SEP holder who improperly moves for injunction is not only subject to contract breach remedies but also competition or antitrust remedies. Such remedies are as blunt a tool against a SEP holder as injunction is against an implementer.

While the 2015 text has problems, I am not opposed to a balanced discussion of injunction in the policy. As noted above, such a balance might involve the following. First, there should be no injunctive relief sought or granted unless and until a SEP holder demonstrates bad faith (e.g. refusal to negotiate with reasonable diligence) of an implementer in negotiating toward RAND. And second, there should be no standards-related antitrust relief sought or granted unless and until an implementer demonstrates bad faith (i.e. refusal to negotiate with reasonable diligence) of a SEP holder in negotiating toward RAND. Some may contend that "bad faith" is not defined, however courts have made such determinations in various contexts related to standards and related areas. For example, a SEP holder that sends notice for multiple SEPs, and then a month or two later seeks an injunction would be bad faith and failure to negotiate toward RAND. And an implementer that ignores notice letters or communicates that it will not take a license under a SEP would be acting in bad faith.
In most cases, it will be very difficult to secure an injunction for SEP infringement when a court considers the eBay factors of adequacy of money damages, public interest, and parties' relative interests associated with an injunction. Nonetheless, injunction is a powerful tool especially where a SEP is "necessary" to comply with an industry standard. Overuse of injunctive relief in standards can chill adoption of IEEE standards.

Some balanced statement about implementer conduct and SEP holder conduct could be useful in determining the less robust availability of injunctive relief. But the 2015 text does not approach a fair balance. Items to consider in preparing a discussion of "injunctive-type relief" for the Policy follow:

1. The "Prohibitive Order" provision starts with a proscriptive sentence that is 111 words long, with a collection of commas and semicolons, that Gordian couldn't untangle. Availability of injunctive relief is sliced thin if not effectively precluded and, in some instances, precluded for questionable reasons. Balance is lacking. Readability is also important.

2. Under the 2015 Policy, a SEP holder, in effect, can't seek injunction unless implementer does not participate in "adjudication" or fails to comply with the "outcome of adjudication..." The provision allowing injunction only applies for litigation, and has no provision regarding conduct during negotiations. As written, an implementer avoids request for injunction if it defies RAND and ignores multiple efforts to negotiate, and does not reply to notice letters, and files an antitrust claim (prematurely) against the SEP holder, and even perhaps states in writing that it will not engage in discussions, etc. The likelihood of the "adjudication" conditions arising are small and atypical.

3. The proscription requires that the "adjudication" be "in that jurisdiction by one or more courts that have the authority to:" [Lengthy list of conditions]. If a "jurisdiction" does not have authority to do any one of the listed items, the SEP holder may be precluded from seeking injunction EVEN IF the implementer ignores SEP holder efforts to license or even negotiate. Under the provision, it is not clear that the implementer must avail itself of a listed item for the proscription to apply. For example, even if the implementer has no "counterclaims," an injunction might be precluded under the Policy as drafted, merely if the court does not have authority to decide some (hypothetical) counterclaim. There is no suggestion that such "counterclaims" relate to the SEP or standard at issue! How would the text address a German system in which infringement and validity are adjudicated by different courts? It is not clear if the text allows or precludes German actions. If a U.S. court cannot adjudicate a German patent infringement or Admiralty counterclaim or some state court action brought by the implementer, is the SEP holder precluded from seeking injunction?

4. The 2015 Policy states that "An Accepted LOA that contains such a [RAND] statement signifies that reasonable terms and conditions, including...under Reasonable Rates, are sufficient compensation for a license." Under U.S. law [eBay], a patent holder seeking injunction MUST show that monetary damages (payment) are inadequate to address the infringement. The foregoing LOA statement contends that a Reasonable Rate is adequate which could impact availability of injunction under any circumstances. That is, under the 2015 Policy, a SEP holder can seek injunction (when the listed conditions and other limitations are satisfied), but the LOA statement may be argued to block that action. The narrow availability of injunction may be illusory in view of the LOA statement. The 2015 Protective Order text seemingly misdirects participants.

5. When joining a standard, implementers should have the comfort of not being enjoined if they agree to and proceed to negotiate reasonably diligently without predatory or dilatory conduct by the implementer. Similarly, when joining a standard, it is fundamental that a Member with a SEP should
have comfort that his patent will realize RAND royalties and will not be deprived rights when implementers do not work toward reasonable, nondiscriminatory terms and conditions. The Policy should balance and avoid potential abuse from either party. Various groups and courts have considered what conduct is reasonable and what conduct violates RAND by each party. To be successful, the Policy should effectively address both sets of interests, or leave the process to the parties and adjudicators with perhaps a brief statement outlining the foregoing principles.

Comments regarding the ongoing use of the Custom LOA form under this option:

In not including the "Prohibitive Order" provisions, the Custom LOA avoids some of the concerns noted above.
Determining reasonable royalty is difficult. Many different factors and formulas have been adopted by courts. Admittedly, there is substantial consensus that royalties should, as stated in the 2015 Policy, reflect the value of the invention. However, determining that value is not a simple task. The 2015 Policy “excludes [from SEP valuation] the value, if any, resulting from the inclusion of that Essential Patent Claim’s technology in the IEEE Standard...” That premise is not universally adopted. On the one hand, should an invention’s value never consider its use or inclusion in a larger environment? If a car can’t be sold in a state without an emission control device (ECD) that is covered by a patent, that patent may command a high royalty. Perhaps even more than the cost to make the box! If that patent is a SEP that covers a (IEEE) standard, must the criticality of the ECD to the car be ignored in valuation -- as the 2015 Policy states? On the other hand, where all SEPs are “required” by a standard, should rates be inflated by applying a large royalty base? Moreover, should a holder of a component patent receive royalties more attributable to other components or the combination? Admittedly, this is a tough puzzle. The effort to fix a rule for royalties should involve a review of court cases and use cases, and a review of consequences and nuances for such interpretations, and should address interests of the various parties. The 2015 text does not.

Another question in specifying reasonable royalties is whether courts should or would follow the 2015 Policy dictates that might interfere with the court's assessment or precedent of what a reasonable rate might be? A related question is whether IEEE should be disfavoring royalty approaches that might otherwise be available in a court? In a number of standards cases, courts have taken a fraction of (plaintiff's SEPs/total number of SEPs for the standard) and multiply that by a "calculated" total SEP royalty in order to assess the plaintiff's share. Would that method comport with the IEEE Policy that excludes "SEP in a standard" as a consideration.

In addition to the "normative" preamble of the Reasonable Rate (RR) definition, there are also factors listed. These various items, that also reduce possible royalties, are not universally accepted and are problematic. For example, item (ii) urges consideration of the value of Company Y's SEPs compared to the value of all SEPs in the standard. What parties or what court will extend the valuation task to finding not just the value of the Y's SEPs, but the value of every other companies' SEPs! How practical is that for small or even large companies? Finding supposed SEPs, determining if they are "essential" and valid, and then appraising their values! (As noted above, some courts do a quantitative approach based on patent counts, but value in the Policy may require more.) Is this "option" steering parties into a "money pit" and away from the IEEE Policy?

It is appreciated that various IEEE supplemental materials interpret the (i) through (iii) factors as "non-mandatory." Nonetheless, there is still concern that individuals reading the text that parties "SHOULD INCLUDE, but need not be limited to, consideration" of the three factors (i), (ii), and (iii) will see some requirement in that. Those ancillary materials interpret the "not limited to" phrase to allow for modification or addition to (i) through (iii) and not just additional factors like (iv) and (v). But readers of the Policy alone may be challenged to interpret the "not limited" clause that way.

Factor (iii), as noted in the past, remains seriously flawed. Participants should not be forced to pour through reams of FAQs to find guidance that tries to make sense of the clause. As the PatCom recalls, there was considerable discussion that "existing license agreements" are deemed critical evidence by courts in determining RR. Item (iii), as written, urges consideration of "existing licenses...where such licenses were not obtained under the explicit or implicit threat of a Prohibitive
Order... “As most patent practitioners appreciate, in almost every license negotiation, there is an implicit threat of injunction. Even in many standards settings, a party acting in "bad faith" may be subject to injunction (as recent cases have shown). A party that reads factor (iii) would wonder about what "existing license agreements" SHOULD be considered. It is appreciated that the FAQs suggest that "not limited to" language in the "factors" text means that existing licenses WITH injunction threats CAN be considered, but are not covered by the "SHOULD"? A reader not jumping to the FAQs would interpret the Policy to steer away from agreements where there is an implicit (or explicit) threat of injunction. Which would exclude a host of vital license agreements, especially those pre-standard. The effort to re-define "implicit" in FAQ46 is curious and not helpful. That FAQ states that the "implicit threat" term applies to "a patent holder reminding an implementer that injunction is available…" That sounds QUITE EXPLICIT to me! Moreover, it does not address truly implicit threats where injunction is not mentioned but is present. Instead of confusing band-aids, could some of the IEEE explanatory text be adopted to clarify and simplify the policy? For example, based on 2019 IEEE slides, should the “Reasonable Rate” factor (iii) read something like:

(iii) non-mandatory consideration of…any comparable existing license [agreements]. For example, the negotiation may consider what claims are licensed in the existing agreement and the contemplated agreement, and the negotiating circumstances for the two agreements.

This proposal avoids confusion as to what an “implicit threat of injunction means” and directs parties to what courts consider useful evidence. The “negotiating circumstances” may include the “threat” feature as well as whether the SEP holder has multiple arms-length license agreements under the terms offered for the contemplated agreement, etc. “Circumstances” could also include settlement agreements made as the result of litigation. Such an approach leaves the negotiation to the parties as the IEEE policy provides, while providing guiderails. A reader should not be required to divine "reasonable royalties" from FAQs or slides rather than the Policy itself.

**Cons:**

Some specifications, or factors, for "Reasonable Rates" might help add certainty, lessen disputes over royalties, and provide direction. Such specifications should address points of general agreement and perhaps address "royalty negotiation" process, which are less complex than a one-size-fits-all structure for determining royalties in disparate technologies, standards, parties, and situations. The 2015 optional factors do not achieve those ends, but other specifications might.

**Comments regarding the ongoing use of the Custom LOA form under this option:**

Given concerns with the 2015 Reasonable Rates "definition" (which includes various optional factors) and the intent of making the Custom LOA subject to pre-2015 Policy, it is logical and sensible to exclude the 2015 RR optional factors from the Custom LOA. Put differently, including the 2015 RR options and the 2015 "Prohibitive" injunction sections would render the Custom LOA largely moot.
Option iii: Offer more options than before by: Allowing an LOA filer the ability to choose whether it may seek or not seek Prohibitive Orders in accordance with the current wording of the Patent Policy; and Clarifying the optionality of the factors included in the definition of Reasonable Rate.

**Pros:**

I see no benefit to the new "options."

**Cons:**

This is not a sound approach. The proposed “injunction” choice would be sorely wrong-headed. If a participant wishes to forego injunction in an IEEE standard context under any circumstance, go ahead and make a pledge. I do not see the value of including it in IEEE Policy. If there is to be a RR provision, it should be re-drafted. The clarifying approach has not worked. See discussion above regarding RR.

Comments regarding the ongoing use of the Custom LOA form under this option:

I do not see how the Custom LOA works with RR options or Injunction provisions that necessitated the drafting of the Custom LOA?
Option i: No change to the text of the 2015 Patent Policy

Pros:

| This is by far the best option. As I wrote (with Brian Scarpelli): “[A]ccording to empirical research and analysis, after the [2015] updates became effective, the IEEE’s standardization work — as measured by approval, technical influence, membership and the initiation of new projects — has been more successful than ever.” In addition, “the handful of companies” that opposed the IP policy updates and thereafter chose not to provide FRAND commitments to the IEEE “are not now, and never have been, among the more active contributors to 802.11,” with “the data indicat[ing] that they are each relatively minor players in development of the standard,” with “some ... not contributors at all.” [1] https://www.law360.com/articles/1392222/how-standard-setting-orgs-can-curb-patent-litigation (citing IPLytics, IEEE’s Empirical Record of Success and Innovation Following Patent Policy Updates (2018)). The radical views of former Antitrust Division head Makan Delrahim are now gone. No current U.S. agency is likely to have a problem with the 2015 Patent Policy. And given the bipartisan recognition of the harms from patent holdup (see the unanimously adopted 2007 DOJ/FTC report and 2011 FTC report), such out-of-the-mainstream views may not return. |

Cons:

| None |

Comments regarding the ongoing use of the Custom LOA form under this option:

| |

Option ii(a): Remove all of the Patent Policy provisions regarding Prohibitive Orders

Pros:

| None |
A holder of a standard essential patent that makes a FRAND promise refrains from seeking injunctive relief against a "willing licensee." More than 15 years ago, the U.S. Supreme Court explained that patentholders are not automatically entitled to injunctions, and the Federal Circuit has made clear that the eBay framework "provides ample strength and flexibility for addressing the unique aspect of FRAND committed patents and industry standards." (Apple v. Motorola, 757 F.3d 1286, 1332 (Fed. Cir. 2015)). Removing these vital provisions would unnecessarily increase the leverage of abusive patentholders.

Option ii(b): Remove all optional factors included in the definition of Reasonable Rate

Pros:
None

Cons:
Removing optional factors would be a mistake. They are optional! Also, they provide guidance on relevant factors, which reduces litigation. See also my response to Option iii for a discussion of how this reduced clarity would have serious consequences for IEEE.

Option iii: Offer more options than before by: Allowing an LOA filer the ability to choose whether it may seek or not seek Prohibitive Orders in accordance with the current wording of the Patent Policy; and Clarifying the optionality of the factors included in the definition of Reasonable Rate.

Pros:
None
Cons:

These options would not be helpful. Brian Scarpelli and I have explained that "[o]ne metric for a successful FRAND policy is the ability to provide clarity to the market," as "[s]uch clarity allows businesses to invest in the standard and develop and sell standardized devices with some level of certainty that they will not become subject to after-the-fact licensing abuses." We cite a study that showed that "cellular standards, which are governed by more ambiguous FRAND rules, such as those of the intellectual property rights policy of [ETSI], are responsible for roughly 75% of all SEP litigation," while IEEE standards "are responsible for approximately only 2% of SEP litigation." [https://www.law360.com/articles/1392222/how-standard-setting-orgs-can-curb-patent-litigation](https://www.law360.com/articles/1392222/how-standard-setting-orgs-can-curb-patent-litigation) (citing IPLytics, SEP Litigation Trends and Licensing Realities 7 (2021)). It also is telling that "[t]he companies that led the opposition to the [2015] IEEE updates" — Nokia, Ericsson, InterDigital, and Qualcomm — and that have predicted the IEEE's demise, are the same companies that historically are responsible for filing the greatest number of SEP lawsuits." In other words, "the IEEE's efforts to provide more market clarity were opposed by those companies that have most often sought to exploit the lack of clarity," [https://www.law360.com/articles/1392222/how-standard-setting-orgs-can-curb-patent-litigation](https://www.law360.com/articles/1392222/how-standard-setting-orgs-can-curb-patent-litigation). The IEEE should not change its successful policies in response to a handful of companies' self-serving objections. In conclusion, adoption of the two options considered here would reduce clarity and make the IEEE less effective.

Comments regarding the ongoing use of the Custom LOA form under this option:
Option i: No change to the text of the 2015 Patent Policy

Pros:

The current IEEE Patent Policy encourages the adoption of IEEE standards by providing a patent licensing environment that is fair and balanced for all stakeholders. Contrary to some commenters, the IEEE’s standard setting activities have continued to flourish under the current Patent Policy. The Patent Policy allows SEP owners to seek FRAND royalties for their SEPs, including obtaining Prohibitive Orders, while also protecting implementers and users of IEEE standards from undue risk, uncertainty, and abusive licensing practices.

Cons:

Changing the IEEE Patent Policy would cause uncertainty in the marketplace, undue risk for implementers IEEE Standards, and have no benefits.

Comments regarding the ongoing use of the Custom LOA form under this option:

We do not support use of the custom LOA form for PARs initiated after adoption of the current Patent Policy.

Option ii(a): Remove all of the Patent Policy provisions regarding Prohibitive Orders

Pros:

Changing the IEEE Patent Policy in the manner suggested by Option (ii)(a) would have no benefits.

Cons:

The current Patent Policy allows SEP owners to seek FRAND royalties for their SEPs, including obtaining Prohibitive Orders, while also protecting implementers and users of IEEE standards from undue risk, uncertainty, and abusive licensing practices. The current Patent Policy provides well-founded and needed clarity around when and how Prohibitive Orders can be obtained. This, in turn, encourages adoption of IEEE standards in products.

Comments regarding the ongoing use of the Custom LOA form under this option:

We do not support use of the custom LOA form for PARs initiated after adoption of the current Patent Policy.
Option ii(b): Remove all optional factors included in the definition of Reasonable Rate

**Pros:**

Changing the IEEE Patent Policy in the manner suggested by Option (ii)(b) would have no benefits.

**Cons:**

The current Patent Policy provides clear and reasonable definitions related to calculation of Reasonable Rates. Removing such definitions would create ambiguity in the marketplace, discourage adoption of IEEE standards, and allow for abusive royalty demands unconnected to the value of the SEPs.

Comments regarding the ongoing use of the Custom LOA form under this option:

We do not support use of the custom LOA form for PARs initiated after adoption of the current Patent Policy.

Option iii: Offer more options than before by: Allowing an LOA filer the ability to choose whether it may seek or not seek Prohibitive Orders in accordance with the current wording of the Patent Policy; and Clarifying the optionality of the factors included in the definition of Reasonable Rate.

**Pros:**

Changing the IEEE Patent Policy in either of these manners would have no benefits.

**Cons:**

The IEEE Patent Policy already allows for the use of Prohibitive Orders. Allowing some LOA filers to self-restrain from the use of Prohibitive Orders, while others do not, just causes unnecessary complexity and confusion in the marketplace, and thus uncertainty and risk in adopting IEEE standards. The Patent Policy already fairly balances the SEP owner's right to obtain a Prohibitive Order, while safeguarding against unrestricted and unbounded use of Prohibitive Orders where they are unwarranted, or other less restrictive options exist.

As noted in option ii(b), the definition of Reasonable Rates provides much needed clarity, and serves to encourage adoption of IEEE Standards.

Comments regarding the ongoing use of the Custom LOA form under this option:

We do not support use of the custom LOA form for PARs initiated after adoption of the current Patent Policy.
Option i: No change to the text of the 2015 Patent Policy

Technical standards are an essential part of how the modern world operates. In 2015, the IEEE revised its patent policy to provide more detailed guidance on what a FRAND commitment required. These provisions specifically addressed concerns about patent hold up and the correct apportionment of royalties. But some parties, including Makan Delrahim, the then Assistant Attorney General for the Antitrust Division of the Department of Justice (DOJ) in the Trump administration, expressed concern that the IEEE was a monopsonist and harming competition.

As we explain in more detail in our forthcoming paper, Why Patent Monopsonies Increase Consumer Welfare (forthcoming, University of Texas Intellectual Property Journal), Delrahim’s concerns are misplaced. Monopsony is typically a problem in the context of private goods—goods which are both excludable and rivalrous. While patent licenses are excludable (i.e. a licensor can refuse to grant the license), they are not rivalrous because the grant of one license does not prevent the simultaneous grant of licenses to other companies. This combination of excludability and non-rivalry means that patent licenses should not be treated as private goods in economic models, but as a type of "artificially scarce goods," sometimes known as "club goods." Importantly, the economics of artificially scarce goods are fundamentally different than the economics of private goods. When a monopsonist buying artificially scare goods lowers prices, it increases output and reduces deadweight loss. In economic terms, lowering price for artificially scarce goods enhances static consumer welfare. Thus, the core rationale for prosecuting monopsonies under antitrust law—to increase allocative efficiency—does not apply to patent monopsonies like SSOs.

Given that the IEEE’s policy does not harm allocative efficiency, the question distills to whether its 2015 policy is a sensible policy for implementing apportionment and addressing patent holdup. First, it is clear that the 2015 policy focuses negotiations on factors that reflect apportionment principles, a concept that both policymakers and courts have endorsed. And second, by limiting the context in which an injunction may be issued, the 2015 policy helps address a patent holdup problem. While some commentators have argued that holdup is not a real problem, Carl Shapiro & Mark Lemley have thoroughly debunked these claims. See Carl Shapiro & Mark A Lemley, The Role of Antitrust in Preventing Patent Holdup, 168 U. PA. L. REV. 2019, 2024, 2028–29 (2020). In short, the current IEEE patent policy is addressing a real problem and should not be changed.
Cons:

None

Comments regarding the ongoing use of the Custom LOA form under this option:

Use of the Custom LOA should not be permitted for projects initiated after March 2015 because all parties involved knew, or should have known, the terms of the IEEE’s patent policy when joining such projects.

Permitting such use for projects initiated after that policy was in effect would allow parties to evade its terms whenever they choose, eroding the certainty and clarity it has supported to date.

Option ii(a): Remove all of the Patent Policy provisions regarding Prohibitive Orders

Pros:

Cons:

As discussed in literature identified in response to option i), addressing patent holdup helps incentivize innovation in standards.

Removing all provisions regarding prohibitive orders would be problematic and make achieving FRAND rates nearly impossible because of the persistent threat of injunctions.

Comments regarding the ongoing use of the Custom LOA form under this option:

Option ii(b): Remove all optional factors included in the definition of Reasonable Rate

Pros:

Cons:

As discussed in literature identified in response to option i), implementing apportionment also helps incentivize innovation in standards.

In particular, the IEEE policy helps clarify what a reasonable rate is and provides at least some framework for preventing outsized royalty rates.
Comments regarding the ongoing use of the Custom LOA form under this option:

Option iii: Offer more options than before by: Allowing an LOA filer the ability to choose whether it may seek or not seek Prohibitive Orders in accordance with the current wording of the Patent Policy; and Clarifying the optionality of the factors included in the definition of Reasonable Rate.

Pros:

Cons:

Allowing LOA filers to choose whether they may seek prohibitive orders is effectively the same as removing the current provisions altogether.

As discussed in our comments in response to ii(a) and ii(b), this policy would harm innovation by allowing patent holdup and outsized royalty rates.

Comments regarding the ongoing use of the Custom LOA form under this option:
Option i: No change to the text of the 2015 Patent Policy

Pros:

For IEEE-SA, there are no pros to retaining the 2015 radical policy. That is not surprising because, as I have written, the 2015 policy was never meant to benefit IEEE-SA. Rather, it was meant to serve litigation and commercial interests of companies like Apple and Intel who wrote it in closed doors (see "Apple Throws an Ally under the Bus Again – The Case of the IEEE" https://www.kidonip.com/frightful-five/apple-throws-an-ally-under-the-bus-against-the-case-of-the-IEEE/)

The few attempts to suggest supposed pros to the policy are not credible. They include (1) A Karachalios paper suggesting that the number of "likes" IEEE-SA received on some social media channel at a random time indicates something about the patent policy (see my blog https://www.kidonip.com/news/anti-patent-leadership-taking-ieee-sa-on-the-road-to-knowhere-part-ii-2/); and (2) An argument that the number of PARs has anything to do with the 2015 patent policy. That argument ignores the well-known fact that, since 2015, and at the initiative of president-elect Yu Yuan, IEEE-SA prioritizes the adoption of an ever-growing number of very short projects (often less than a page long). As such, these short PARs, that are now the majority of PARs, contain no patented innovation. This inflation in trivial PARs thus results from a standalone policy choice — it is not the result of the 2015 patent policy. In fact, if anything, this short PAR inflation proves that, in conjunction with the implementation of the 2015 policy, the "advancing technology" element of IEEE-SA’s mission is being downplayed if not ignored. In other words, the PAR trend of the last six years shows a close correlation between the 2015 patent policy and declining innovation and technological progress in IEEE-SA standards.

I have seen empirical data that the 2015 Patent Policy reduced litigation related to IEEE-SA standards.

Re arguments for supposed "clarity": The only thing that became clear after the 2015 policy was adopted and implemented was that it is an imbalanced non-consensus policy that the majority of LOA Submitters do not agree with.
Cons:

I have written extensively on the many negative implications of the 2015 policy, and provide a summary of some of my articles below.

The IEEE 2015 Patent Policy – A Natural Experiment in Devaluing Technology

https://www.kidonip.com/standard-essential-patents/the-ieee-2015-patent-policy-a-natural-experiment-in-devaluing-technology showing evidence of: delay and chaos in standard development soon after adoption of the policy; IEEE standards lost ANSI quality approval as an American National Standards due to the negative LoA situation; significant 4+ years long delays in disclosure of licensing intentions (submital of LoAs); a significant and unprecedented uptick in negative LoAs; IEEE-SA has come under an expensive and prolonged DOJ antitrust investigation; and reputational damage.


1) In 2021 75% of those who submitted LOAs to IEEE rejected the 2015 patent policy by submitting negative LOAs or Custom LOAs governed under the pre-2015 policy. Thus, while it may be popular with those who want to free-ride on IEEE standardized technology, the 2015 policy clearly loses the popular vote of LOA submitters. A policy that completely ignores the positions of LOA submitters is imbalanced and thus does not serve IEEE-SA well.

2) New companies are now submitting negative LOAs (e.g. General Electric and Fraunhofer) and custom LOAs (e.g. MediaTek, Sony, NEC, SK Telekom and many others).

3) As of 2021, all IEEE 802.11 standards lost ANSI ANS approval

4) While in a May 2021 resolution IEEE-SA admits that “everyone has an interest in the patent policy”, at the same time, it continues to develop and consider revisions to that patent policy in secret executive sessions. This includes the current “call for comments” that was developed in executive sessions. This demonstrates how, for six years and ongoing, the 2015 policy revisions continue to be a liability to IEEE-SA and involve high legal costs (also demonstrated by recent retaining of a new outside counsel to its growing team – Mr. Renner). When, for years, a large portion of IEEE’s funds go towards legal fees instead of towards ‘advancing technology to the benefit of humanity’ – IEEE-SA’s standards and humanity both lose. Reverting back to the last policy that was developed in an open manner that allowed “everyone that had an interest in it” to participate would be the trusted way to reduce the liability and legal bills. That policy is the policy that was in effect on March 14, 2015.

5) Last, and very significant: due to the negative LOA situation, ISO now rejects the fast-tracking of 802.11 standards as International Standards. The August 2021 ballot for 802.11ax has now been stuck for two months; and the October 2021 ballot for 802.11ay recently failed (!). In other words, not only ANSI has realized that the quality of IEEE-SA standards has plummeted and no longer meets its standards. ISO and the international community now understand that as well.

My work demonstrates the many negative effects of the 2015 patent policy. I am glad and reassured that “this is a call for input and is not a vote. IEEE will use its own judgment in determining what it believes is the most appropriate approach to the IEEE SA Patent Policy”. Indeed, the goal of this exercise should be what is the best policy for IEEE-SA.
Comments regarding the ongoing use of the Custom LOA form under this option:

The Custom LOA form was introduced in June 2019 after experience of over four years has shown that the 2015 patent policy compromises IEEE-SA standards and is untenable. For example, at the time it was introduced, some companies were over four years delayed in submitting any LOAs, and negative LOA submittal rates skyrocketed.

The introduction of the Custom LOA released some of the negative pressures from the failed 2015 policy in that it allowed another route for Submitters who did not agree to provide RAND access under the radically different 2015 policy. The Custom LOA’s popularity demonstrates that the vast majority of LOA submitters do not agree with the 2015 policy. The rational take away from this natural experiment should be to revert to the patent policy and LOA form that were in place right before the 2015 patent policy took effect.

Retaining the 2015 policy while eliminating the Custom LOA form would be a grave mistake because it has already proven to fail. As the saying goes "insanity is doing the same thing over and over again but expecting different results." Anyone who calls for retaining all the elements of the 2015 patent policy while removing the Custom LOA form may be putting its own commercial and litigation interests ahead of IEEE-SA’s interests.

Option ii(a): Remove all of the Patent Policy provisions regarding Prohibitive Orders

Pros:

Removal of Prohibitive Orders provisions that were added as part of the 2015 rewriting of the patent policy that have proven to compromise IEEE-SA’s interests is likely would move the policy toward a more balanced one. Balanced policies that take account of all stakeholders’ views generally serve standards development organizations better than imbalanced non-consensus policies.

Cons:

There are no cons for removing that language.
Comments regarding the ongoing use of the Custom LOA form under this option:

The Custom LOA form was introduced in June 2019 after experience of over four years has shown that the 2015 patent policy compromises IEEE-SA standards and is untenable. For example, at the time it was introduced, some companies were over four years delayed in submitting any LOAs, and negative LOA submittal rates skyrocketed.

The introduction of the Custom LOA released some of the negative pressures from the failed 2015 policy in that it allowed another route for Submitters who did not agree to provide RAND RAND access under the radically different 2015 policy. The Custom LOA’s popularity demonstrates that the vast majority of LOA submitters do not agree with the 2015 policy. The rational take away from this natural experiment should be to revert to the patent policy and LOA form that were in place right before the 2015 patent policy took effect.

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Option ii(b): Remove all optional factors included in the definition of Reasonable Rate

Pros:

Removal of the “optional” Reasonable Rate” factors that were added as part of the 2015 rewriting of the patent policy that have proven to compromise IEEE-SA’s interests is likely would move the policy toward a more balanced one. Balanced policies that take account of all stakeholders’ views generally serve standards development organizations better than imbalanced non-consensus policies.

Cons:

The removal is not through enough. All language re “Reasonable Rate” should be removed. I am not aware of any other standards development organizations that attempted to define the commercial terms in its Patent Policy. Indeed, the IEEE-SA Patent Policy also did not include such a definition until 2015. And, since inclusion of such language in 2015, the patent policy has failed in multiple ways. There is no proof the “mandatory” Reasonable Rate language is less responsible to the failure of the 2015 policy than the “optional” Reasonable Rate language. It would be most prudent to remove both.
The Custom LOA form was introduced in June 2019 after experience of over four years has shown that the 2015 patent policy compromises IEEE-SA standards and is untenable. For example, at the time it was introduced, some companies were over four years delayed in submitting any LOAs, and negative LOA submittal rates sky-rocketed.

The introduction of the Custom LOA released some of the negative pressures from the failed 2015 policy in that it allowed another route for Submitters who did not agree to provide RAND RAND access under the radically different 2015 policy. The Custom LOA’s popularity demonstrates that the vast majority of LOA submitters do not agree with the 2015 policy. The rational take away from this natural experiment should be to revert to the patent policy and LOA form that were in place right before the 2015 patent policy took effect.

Retaining the 2015 policy while eliminating the Custom LOA form would be a grave mistake because it has already proven to fail. As the saying goes “insanity is doing the same thing over and over again but expecting different results.” Anyone who calls for retaining all the elements of the 2015 patent policy while removing the Custom LOA form may be putting its own commercial and litigation interests ahead of IEEE-SA’s interests.

Comments regarding the ongoing use of the Custom LOA form under this option:

<table>
<thead>
<tr>
<th>Option iii: Offer more options than before by: Allowing an LOA filer the ability to choose whether it may seek or not seek Prohibitive Orders in accordance with the current wording of the Patent Policy; and Clarifying the optionality of the factors included in the definition of Reasonable Rate.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Pros:</strong></td>
</tr>
<tr>
<td>None</td>
</tr>
<tr>
<td><strong>Cons:</strong></td>
</tr>
<tr>
<td>A patchwork policy is not a good solution. For over six years now, IEEE-SA introduced multiple follow-on revisions to the failing 2015 Patent Policy. This proposal is for yet another similar patch. Instead of all these patches, a holistic approach of reverting to the complete policy that was in effect before the 2015 policy and served IEEE-SA well is the most practical solution to the challenges IEEE-SA standards currently face.</td>
</tr>
</tbody>
</table>
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Retaining the 2015 policy while eliminating the Custom LOA form would be a grave mistake because it has already proven to fail. As the saying goes “insanity is doing the same thing over and over again but expecting different results.” Anyone who calls for retaining all the elements of the 2015 patent policy while removing the Custom LOA form may be putting its own commercial and litigation interests ahead of IEEE-SA’s interests.
Option i: No change to the text of the 2015 Patent Policy

Pros:

The 2015 policy was approved by votes at all levels of IEEE governance and there is no reason to change it now. What's more, the 2015 policy is an exemplar of an SDO IPR policy that is clear and attempts to remove the ambiguity that plagues policies of other SDOs. Retreating from IEEE's forward-looking policy at this point would send a negative signal to the entire industry.

Cons:

Comments regarding the ongoing use of the Custom LOA form under this option:

Option ii(a): Remove all of the Patent Policy provisions regarding Prohibitive Orders

Pros:

None

Cons:

Seeking a prohibitive order against a willing SEP licensee is entirely inconsistent with the FRAND commitment. Excluding Prohibitive Orders is absolutely necessary to the proper functioning of the FRAND licensing system, and should remain embedded in the IEEE policy.

Comments regarding the ongoing use of the Custom LOA form under this option:

Option ii(b): Remove all optional factors included in the definition of Reasonable Rate

Pros:

none
Cons:

These options are quite helpful to parties discussing FRAND licensing terms. There is no reason to eliminate them from the policy, particularly as they are optional and not mandatory.

Comments regarding the ongoing use of the Custom LOA form under this option:

Pros:

none

Cons:

Leave the policy as is. Modifying it to water down its sensible approach to FRAND licensing is not useful, and will only increase ambiguity and opacity in the licensing process.

Comments regarding the ongoing use of the Custom LOA form under this option:
### Option i: No change to the text of the 2015 Patent Policy

**Pros:**

<table>
<thead>
<tr>
<th>The IEEE Patent Policy provides clarity in the marketplace, reduces disputes, and preserves competition. It fairly balances the interests of patent holders and equipment manufacturers. Revising the policy would destabilize the system and increase costs.</th>
</tr>
</thead>
</table>

**Cons:**

<table>
<thead>
<tr>
<th>None</th>
</tr>
</thead>
</table>

**Comments regarding the ongoing use of the Custom LOA form under this option:**

For projects started after adoption of the Patent Policy, the custom LOA form should not be permitted.

### Option ii(a): Remove all of the Patent Policy provisions regarding Prohibitive Orders

**Pros:**

<table>
<thead>
<tr>
<th>There are no benefits to removing the patent policy limitations on prohibitive orders.</th>
</tr>
</thead>
</table>

**Cons:**

<table>
<thead>
<tr>
<th>The use of injunctions pertaining to IEEE standards would be bad for IEEE, consumers, and for standards, generally. It is also inconsistent with FRAND commitments, except in extreme situations (such as for enforcement of an adjudicated, final, non-appealable award of damages).</th>
</tr>
</thead>
</table>

**Comments regarding the ongoing use of the Custom LOA form under this option:**

For projects initiated after adoption of the Patent Policy, IEEE should not permit use of the custom LOA form.
### Option ii(b): Remove all optional factors included in the definition of Reasonable Rate

**Pros:**
- There are no benefits to removing the optional factors.

**Cons:**
- These factors can be helpful to parties, and since they are optional, they are not harmful.

**Comments regarding the ongoing use of the Custom LOA form under this option:**
- For projects initiated after adoption of the Patent Policy, IEEE should not permit use of the custom LOA form.

### Option iii: Offer more options than before by:

- Allowing an LOA filer the ability to choose whether it may seek or not seek Prohibitive Orders in accordance with the current wording of the Patent Policy; and
- Clarifying the optionality of the factors included in the definition of Reasonable Rate.

**Pros:**
- No benefits.

**Cons:**
- Changes are unnecessary and will create instability.

**Comments regarding the ongoing use of the Custom LOA form under this option:**
- For projects initiated after adoption of the Patent Policy, IEEE should not permit use of the custom LOA form.
Option i: No change to the text of the 2015 Patent Policy

Pros:

- Sierra fully supports the Patent Policy. It has provided clarity and predictability for companies that develop and implement IEEE standards.
- Sierra provides connectivity modules for IOT and other communication devices. Our modules enable various use cases for IEEE standards, such as home automation and security, tracking and telematics, personal health devices, industrial equipment, building automation, street lighting, and much more. Undermining or watering down the patent policy to enable SEP abuses – such as those more commonly encountered in the cellular space – would diminish a key advantage for IEEE standards and their ecosystem. The Patent Policy helps to limit disputes in the market, and creates a more fair, and more safe, environment for use and growth of IEEE standards.

Cons:

- Keeping the Patent Policy as is would not have any meaningful cons.

Comments regarding the ongoing use of the Custom LOA form under this option:

- The Custom LOA should not be used for projects started after the Patent Policy’s effective date.

Option ii(a): Remove all of the Patent Policy provisions regarding Prohibitive Orders

Pros:

- Changing the Patent Policy in this way would not have any benefits.

Cons:

- SEP injunctions are unnecessary and only promote abusive licensing practices. The Patent Policy’s limitation on the use of injunctions is a core feature and benefit to limit those types of unfair behaviors, which unfortunately have been quite common with non-IEEE standards such as cellular.

Comments regarding the ongoing use of the Custom LOA form under this option:

- The Custom LOA should not be used for projects started after the Patent Policy’s effective date.
Option ii(b): Remove all optional factors included in the definition of Reasonable Rate

Pros:
Changing the Patent Policy in this way would not have any benefits.

Cons:
The Patent Policy provides helpful and needed guidance regarding Reasonable Rates, including the optional factors. This supports licensing discussions, reduces disputes, and prevents unfair behaviors. It also helps to support a common worldwide approach to IEEE standards.

Comments regarding the ongoing use of the Custom LOA form under this option:
The Custom LOA should not be used for projects started after the Patent Policy’s effective date.

Option iii: Offer more options than before by: Allowing an LOA filer the ability to choose whether it may seek or not seek Prohibitive Orders in accordance with the current wording of the Patent Policy; and Clarifying the optionality of the factors included in the definition of Reasonable Rate.

Pros:
Changing the Patent Policy in this way would not have any benefits.

Cons:
Making the Prohibitive Order provisions optional would harm IEEE standards and stakeholders. SEP injunctions are unnecessary and only promote abusive licensing practices. The Patent Policy’s limitation on the use of injunctions is a core feature and benefit to limit those types of unfair behaviors, which unfortunately have been quite common with non-IEEE standards such as cellular. There likewise seems to be no need to revise the Patent Policy to clarify the optionality of the factors included in the definition of reasonable rate. The Patent Policy already provides for such optionality in stating that “determination of such Reasonable Rates should include, but need not be limited to, the consideration of” those factors, and the IEEE has stated publicly and repeatedly that those factors are optional considerations.

Comments regarding the ongoing use of the Custom LOA form under this option:
The Custom LOA should not be used for projects started after the Patent Policy’s effective date.
Option i: No change to the text of the 2015 Patent Policy

Pros:

As a company involved in the telecommunication field, and actively participating in standardization process, our opinion is that the IEEE Patent Policy helps to support the success of IEEE’s standards. It provides clarity in the marketplace, reduces disputes, and preserves and protects the benefits of competition. It fairly balances the interests of SEP holders and users of IEEE standards. IEEE’s standard setting activities have thrived under the current policy, which has been in effect for many years. Revising the policy, as proposed below, however, would increase opportunities for opportunistic conduct by SEP holders.

Cons:

We see no cons to maintaining the IEEE Patent Policy.

Comments regarding the ongoing use of the Custom LOA form under this option:

We consider reasonable that, for standards projects initiated prior to the effective date of the Patent Policy, the custom LOA form should be permitted so that parties may make a declaration pursuant to the text of the IEEE policies that were in effect at the time the project was initiated. But for projects initiated after adoption of the Patent Policy, the custom LOA form should not be permitted.

Option ii(a): Remove all of the Patent Policy provisions regarding Prohibitive Orders

Pros:

We see no benefits to removing the Patent Policy’s express limitations on prohibitive orders.

Cons:

The use of injunctions or similar prohibitive orders against IEEE standards would be bad for IEEE, for IEEE participants, and for consumers. Unless the SEP holder is unable to obtain RAND compensation via other means, such as court adjudication, SEP prohibitive orders are tools of hold up, which interfere with the use and promulgation of IEEE standards. The IEEE Patent Policy correctly balances the interest of SEP holders that seek reasonable compensation with the interests of users of IEEE standards to not be subject to abusive demands and tactics. If IEEE standards become subject to prohibitive orders, companies may choose to avoid IEEE standards in favor of other alternative technologies.
We consider reasonable that, for standards projects initiated prior to the effective date of the Patent Policy, the custom LOA form should be permitted so that parties may make a declaration pursuant to the text of the IEEE policies that were in effect at the time the project was initiated. But for projects initiated after adoption of the Patent Policy, the custom LOA form should not be permitted.

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**Option ii(b): Remove all optional factors included in the definition of Reasonable Rate**

**Pros:**

We see no benefit to removing the optional factors in the definition of Reasonable Rate.

**Cons:**

The Patent Policy properly balances the interest of SEP owners that seek reasonable compensation with the interests of users of IEEE standards to not be subject to abusive demands. Increasing uncertainty around SEP licensing terms would inhibit negotiations, increase disputes, create the potential for abuse, and undermine adoption of IEEE standards.

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**Option iii: Offer more options than before by: Allowing an LOA filer the ability to choose whether it may seek or not seek Prohibitive Orders in accordance with the current wording of the Patent Policy; and Clarifying the optionality of the factors included in the definition of Reasonable Rate.**

**Pros:**

We see no benefits to these approaches.
Cons:

Regarding prohibitive orders under this option iii, IEEE should not create approaches supporting injunctive relief against IEEE standards. The IEEE Patent Policy already provides for the use of prohibitive orders where compensation is not available via less drastic means (e.g., via royalty adjudication). The IEEE Patent Policy correctly balances the interest of SEP holders that seek reasonable compensation with the interests of users of IEEE standards to not be subject to abusive demands and tactics. Such an option would cause confusion and negatively impact IEEE standards.

Regarding the factors included in the definition of Reasonable Rate, this is well addressed in the current policy, and also in the IEEE’s FAQs. Further efforts to modify the text are thus unnecessary and may cause confusion.

Comments regarding the ongoing use of the Custom LOA form under this option:

We consider reasonable that, for standards projects initiated prior to the effective date of the Patent Policy, the custom LOA form should be permitted so that parties may make a declaration pursuant to the text of the IEEE policies that were in effect at the time the project was initiated. But for projects initiated after adoption of the Patent Policy, the custom LOA form should not be permitted.
Option i: No change to the text of the 2015 Patent Policy

Pros:

Cons:
Maintaining the current Policy will continue to divide the IEEE community. Negative LOAs will continue to be filed, which interferes with IEEE standard proliferation. A proper balance must be struck between innovators and implementers. The former policy, without the additional restrictions in the 2015 Patent Policy, struck a better balance than the current one. The policy should encourage FRAND undertakings, not negative LoAs.

Comments regarding the ongoing use of the Custom LOA form under this option:
A Custom LOA form should be maintained.

Option ii(a): Remove all of the Patent Policy provisions regarding Prohibitive Orders

Pros:
Removing the restrictions regarding Prohibitive Orders encourages patent holders to agree to Positive LOAs, which ensures the availability of FRAND-based licensing across the IEEE standards ecosystem. The availability of Prohibitive Orders should be left to the courts, who do not grant this type of relief frivolously in the context of standard essential patents.

Cons:

Comments regarding the ongoing use of the Custom LOA form under this option:
Should Option ii(a) and (b) be enacted, a Custom LOA form is not necessary.
IEEE Standards cover a wide range of technologies, industries, and markets. This shows the strength of the diverse membership involved in IEEE Standards. Accordingly, prescribing a single set of factors, whether mandatory or not, for the valuation of Essential Patent Claims for standards across such a wide variety of industries does not take into account the vast differences between them.

**Option ii(b): Remove all optional factors included in the definition of Reasonable Rate**

**Pros:**

| IEEE Standards cover a wide range of technologies, industries, and markets. This shows the strength of the diverse membership involved in IEEE Standards. Accordingly, prescribing a single set of factors, whether mandatory or not, for the valuation of Essential Patent Claims for standards across such a wide variety of industries does not take into account the vast differences between them. |

| Should Option ii(a) and (b) be enacted, a Custom LOA form is not necessary. |

**Cons:**

| |

**Comments regarding the ongoing use of the Custom LOA form under this option:**

Should Option ii(a) and (b) be enacted, a Custom LOA form is not necessary.

**Option iii: Offer more options than before by: Allowing an LOA filer the ability to choose whether it may seek or not seek Prohibitive Orders in accordance with the current wording of the Patent Policy; and Clarifying the optionality of the factors included in the definition of Reasonable Rate.**

**Pros:**

| While Options ii(a) and (b) will restore a more successful balance of interests amongst participants, this option is a step in the right direction to encourage commitments to at least licensing on FRAND terms. |

**Cons:**

| The scope of changes to the definition of Reasonable Rate are not presented in this request for comment. It is possible a minor change will not take into account the manners in which different industries and markets value Essential Patent Claims in IEEE standards, and therefore will not yield the desired balance between IEEE participants. |

**Comments regarding the ongoing use of the Custom LOA form under this option:**

The offer to use a Custom LOA should be maintained.
Option i: No change to the text of the 2015 Patent Policy

Pros:
The IEEE Patent Policy helps to support the success of IEEE’s standards. It provides clarity in the marketplace, reduces disputes, and preserves and protects the benefits of competition. It fairly balances the interests of SEP holders and users of IEEE standards. IEEE’s standard setting activities have thrived under the current policy, which has been in effect for many years. Revising the policy, as proposed below, however, would increase opportunities for opportunistic conduct by SEP holders. Our companies represent diverse business models for whom the ability to license SEPs on fair, reasonable, and non-discriminatory terms is vital to producing innovative products and services that build on IEEE standards, including but not limited to the IEEE 802 family of standards that enable wireless connectivity.

Cons:
There are no cons to maintaining the IEEE Patent Policy.

Comments regarding the ongoing use of the Custom LOA form under this option:
For standards projects initiated prior to the effective date of the Patent Policy, the custom LOA form should be permitted so that parties may make a declaration pursuant to the text of the IEEE policies that were in effect at the time the project was initiated. But for projects initiated after adoption of the Patent Policy, the custom LOA form should not be permitted.

Option ii(a): Remove all of the Patent Policy provisions regarding Prohibitive Orders

Pros:
There are no benefits to removing the Patent Policy’s express limitations on prohibitive orders.
Cons:

The use of injunctions or similar prohibitive orders against IEEE standards would be bad for IEEE, for IEEE participants, and for consumers. Unless the SEP holder is unable to obtain RAND compensation via other means, such as court adjudication, SEP prohibitive orders are tools of hold up, which interfere with the use and promulgation of IEEE standards. The IEEE Patent Policy correctly balances the interest of SEP holders that seek reasonable compensation with the interests of users of IEEE standards to not be subject to abusive demands and tactics. If IEEE standards become subject to prohibitive orders, companies may choose to avoid IEEE standards in favor of other alternative technologies because of the potential to be excluded from a market based on infringement of a single patent used to comply with a standard incorporated in a complex product or to be forced to pay excessive royalties in order to avoid the leverage that results from threatening such exclusion.

Comments regarding the ongoing use of the Custom LOA form under this option:

For standards projects initiated prior to the effective date of the Patent Policy, the custom LOA form should be permitted so that parties may make a declaration pursuant to the text of the IEEE policies that were in effect at the time the project was initiated. But for projects initiated after adoption of the Patent Policy, the custom LOA form should not be permitted.

Option ii(b): Remove all optional factors included in the definition of Reasonable Rate

Pros:

There would be no benefit to removing the optional factors in the definition of Reasonable Rate

Cons:

Increasing uncertainty around SEP licensing terms would inhibit negotiations, increase disputes, create the potential for abuse, and undermine adoption of IEEE standards. The Patent Policy properly balances the interest of SEP owners that seek reasonable compensation with the interests of users of IEEE standards to not be subject to abusive demands. Indeed, we have benefited from the certainty the 2015 Patent Policy provides by being more willing to invest in new technologies and bring new products to market.

Comments regarding the ongoing use of the Custom LOA form under this option:

For standards projects initiated prior to the effective date of the Patent Policy, the custom LOA form should be permitted so that parties may make a declaration pursuant to the text of the IEEE policies that were in effect at the time the project was initiated. But for projects initiated after adoption of the Patent Policy, the custom LOA form should not be permitted.
Option iii: Offer more options than before by: Allowing an LOA filer the ability to choose whether it may seek or not seek Prohibitive Orders in accordance with the current wording of the Patent Policy; and Clarifying the optionality of the factors included in the definition of Reasonable Rate.

**Pros:**

| There would be no benefits to these approaches. |

**Cons:**

| As to 3(i), IEEE should not create approaches supporting injunctive relief against IEEE standards. The IEEE Patent Policy already provides for the use of prohibitive orders where compensation is not available via less drastic means (e.g., via royalty adjudication). The IEEE Patent Policy correctly balances the interest of SEP holders that seek reasonable compensation with the interests of users of IEEE standards to not be subject to abusive demands and tactics. Option 3(i) would cause confusion and negatively impact IEEE standards. If each contributor to an IEEE standard is subject to a different RAND licensing commitment the meaning of IEEE patent policy will become more opaque and lead to more opportunities for opportunistic behavior by aggressive SEP licensors and less guidance for courts when parties to a licensing negotiation reach an impasse and seek resolution from a third party. |

| As to 3(ii), the optionality of the factors in the Patent Policy already is well addressed in the policy, and also in the IEEE’s FAQs. Further efforts to modify the text are thus unnecessary and may cause confusion. |

**Comments regarding the ongoing use of the Custom LOA form under this option:**

| For standards projects initiated prior to the effective date of the Patent Policy, the custom LOA form should be permitted so that parties may make a declaration pursuant to the text of the IEEE policies that were in effect at the time the project was initiated. But for projects initiated after adoption of the Patent Policy, the custom LOA form should not be permitted. |
Option i: No change to the text of the 2015 Patent Policy

Pros:

| The 2015 IEEE Patent Policy supports the success of IEEE’s standards. It provides clarity in the marketplace, reduces disputes, and preserves and protects the benefits of competition. Vehicles incorporate tens of thousands of components manufactured by various levels of the supply chain, including components which implement IEEE standards such as the 802 family of standards. Automotive manufacturers typically require suppliers to deliver components, including those implementing compatibility standards, free from third party intellectual property rights because suppliers have the best understanding of the technologies implemented by the components. However, many owners of standard essential patents (“SEPs”) focus their licensing efforts on downstream manufacturers of multicomponent products in an effort to gain royalties disproportionate to the value of the patented technology. These licensing practices are often underpinned by the threat of an injunction if manufacturers do not accede to unreasonable royalties. The current Patent Policy contains much needed clarity regarding the meaning of a “Reasonable Rate,” which reduces the ability of SEP owners to seek royalties unrelated to the value of their patented technology. Similarly, the current Patent Policy’s position against seeking Prohibitive Orders without first seeking an adjudication of the Reasonable Rate and other reasonable terms and conditions for a license gives willing licensees an opportunity to hold good faith negotiations for a license absent the threat of an injunction pressuring them to accept unreasonable licensing terms. Revising the current Patent Policy to remove these important provisions would encourage opportunistic behavior and negatively impact IEEE standards. When SEP owners are permitted to seek royalties far in excess of reasonable rates backed by the threat of potential injunctive orders against willing licensees, such behavior threatens the viability of existing product lines which depend on compatibility standards and undermines the incentives for companies to invest in developing new products implementing those standards. This is particularly true in situations where companies considering entering the market can choose from competing standards to achieve similar functionality in their products. Any changes which weaken the IEEE Patent Policy could significantly inhibit the widespread adoption of IEEE standards. |

Cons:

- There are no cons to maintaining the IEEE Patent Policy.

Comments regarding the ongoing use of the Custom LOA form under this option:

For standards projects initiated prior to the effective date of the Patent Policy, the custom LOA form should be permitted so that parties may make a declaration pursuant to the text of the IEEE policies that were in effect at the time the project was initiated. But for projects initiated after adoption of the Patent Policy, the custom LOA form should not be permitted.
Option ii(a): Remove all of the Patent Policy provisions regarding Prohibitive Orders

Pros:

There are no benefits to removing the Patent Policy’s express limitations on prohibitive orders.

Cons:

Allowing owners of standard essential patents to seek injunctions or similar prohibitive orders against implementers of IEEE standards without first seeking an adjudication of reasonable terms and conditions for a license negatively impact IEEE, IEEE participants, and consumers. Unless an implementer is unwilling to participate in or abide by an adjudication of reasonable terms and conditions for a license, prohibitive orders based on standard essential patents are tools of hold up, which interfere with the use and promulgation of IEEE standards. As manufacturers of large, multicomponent products, where only a very small fraction of those components relate to the implementation of IEEE standards, the threat of unrestricted prohibitive orders has an outsized impact on automotive manufacturers. The current IEEE Patent Policy correctly balances the interest of patent owners that seek reasonable compensation with the interests of implementers of IEEE standards to not be subject to abusive demands and tactics.

Comments regarding the ongoing use of the Custom LOA form under this option:

For standards projects initiated prior to the effective date of the Patent Policy, the custom LOA form should be permitted so that parties may make a declaration pursuant to the text of the IEEE policies that were in effect at the time the project was initiated. But for projects initiated after adoption of the Patent Policy, the custom LOA form should not be permitted.

Option ii(b): Remove all optional factors included in the definition of Reasonable Rate

Pros:

There would be no benefit to removing the optional factors in the definition of Reasonable Rate.

Cons:

The current IEEE Patent Policy provides clarity regarding the meaning of the term Reasonable Rate. It provides a consistent set of factors to consider regardless of where in the value chain an owner of standard essential patents is attempting to license. Removing the factors from the definition of Reasonable Rate would introduce uncertainty regarding appropriate considerations for determining a reasonable royalty, which is likely to lead to an increase in the number of disputes regarding licensing under the IEEE Patent Policy. Specifically, removing the factors from the Patent Policy could lead to an increase in owners of standard essential patents attempting to capture value unrelated to the patented technology as it relates to implementation of IEEE standards solely by virtue of including standard-compliant components in multicomponent products. The current Patent Policy strikes the appropriate balance of interests between SEP owners seeking reasonable compensation and the interests of implementers to avoid abusive royalty demands, and the clarity provided by the factors listed in the current policy should be maintained.
Comments regarding the ongoing use of the Custom LOA form under this option:

For standards projects initiated prior to the effective date of the Patent Policy, the custom LOA form should be permitted so that parties may make a declaration pursuant to the text of the IEEE policies that were in effect at the time the project was initiated. But for projects initiated after adoption of the Patent Policy, the custom LOA form should not be permitted.

Option iii: Offer more options than before by: Allowing an LOA filer the ability to choose whether it may seek or not seek Prohibitive Orders in accordance with the current wording of the Patent Policy; and Clarifying the optionality of the factors included in the definition of Reasonable Rate.

Pros:

There would be no benefits to either of these approaches.

Cons:

As to the first point under Option iii, IEEE should not create approaches supporting injunctive relief or other exclusionary relief against implementers of IEEE standards. The IEEE Patent Policy already provides for the use of prohibitive orders in the limited circumstance where compensation is not available via royalty adjudication, while correctly recognizing that prohibitive orders are improper for the vast majority of disputes patents essential to compatibility standards such as those promulgated by the IEEE. Option iii could potentially cause confusion by making different licensors subject to different rules, and will almost certainly lead to more licensors using the threat of injunctive relief to force implementers to take licenses above Reasonable Rates. Such uncertainty and increased abusive behavior will negatively impact the widespread adoption of and continued participation in IEEE standards.

As to the second point under Option iii, the optionality of the factors in the Patent Policy already is well addressed in the policy, and also in the IEEE’s FAQs. Further efforts to modify the text are thus unnecessary and may cause confusion.

Comments regarding the ongoing use of the Custom LOA form under this option:

For standards projects initiated prior to the effective date of the Patent Policy, the custom LOA form should be permitted so that parties may make a declaration pursuant to the text of the IEEE policies that were in effect at the time the project was initiated. But for projects initiated after adoption of the Patent Policy, the custom LOA form should not be permitted.
Pros:
Uncertainty & Confusion in ETSI FRAND Terms Are Responsible for 75% of All SEP Litigation in Past 20 Years: One of the clearest indicators of uncertainty and confusion within contracts and other legal texts is the amount of litigation that they spawn. Litigation over SEPs in digital communications standards like LTE has grown exponentially in recent years, more than quadrupling between 2009 and 2017 alone according to analysis from darts-ip. Additionally, IPLytics analyzed twenty years of worldwide SEP litigation, from 2001-2021, and found that more than 75 percent of that litigation was related to 2G, 3G, 4G and 5G standards. Meanwhile, just two percent of SEP litigation during the same time period was related to IEEE’s Wi-Fi standards.

Cons:
Changing the IEEE-SA Patent Policy would not provide any meaningful benefits. Undoing the clarifications made to the Patent Policy in 2015 would simply enable the same SEP abuses (and negative impacts of that abuse) that IEEE-SA has already recognized and taken successful steps to prevent. Further, changes to the IEEE-SA policy would, by undercutting the certainty it provides, negatively impact participation from small businesses like ours in the software development industry that have come to rely on its clarity.

Comments regarding the ongoing use of the Custom LOA form under this option:
Use of the Custom LOA for IEEE-SA projects initiated prior to March 2015 can be supported. Use of the Custom LOA should not be permitted for other projects, since all parties involved would have been aware of the terms of the IEEE-SA Patent Policy when joining such projects.

Option ii(a): Remove all of the Patent Policy provisions regarding Prohibitive Orders

Pros:

Cons:
Comments regarding the ongoing use of the Custom LOA form under this option:

**Option ii(b): Remove all optional factors included in the definition of Reasonable Rate**

**Pros:**

**Cons:**

Comments regarding the ongoing use of the Custom LOA form under this option:

**Option iii: Offer more options than before by:** Allowing an LOA filer the ability to choose whether it may seek or not seek Prohibitive Orders in accordance with the current wording of the Patent Policy; and Clarifying the optionality of the factors included in the definition of Reasonable Rate.

**Pros:**

**Cons:**

Comments regarding the ongoing use of the Custom LOA form under this option:
Option i: No change to the text of the 2015 Patent Policy

Pros:

ESMIG strongly supports the IEEE Patent Policy which helps to support the success of IEEE’s standards. It provides clarity in the market place, reduce disputes and preserves and protects the benefits of competition. It fairly balances the interests of SEP holders and users of IEEE standards.

Our members provide products, information technology and services for multicommodity metering and for the display and management of energy consumption and production at consumer premises. Cellular chipset and module providers implement Wireless Communications Standards in their products sold to smart meters manufacturers.

Cons:

We see no cons to maintaining the IEEE Patent policy.

Comments regarding the ongoing use of the Custom LOA form under this option:

Option ii(a): Remove all of the Patent Policy provisions regarding Prohibitive Orders

Pros:

There are no benefits to removing the Patent Policy provisions regarding prohibitive orders.

Cons:

Comments regarding the ongoing use of the Custom LOA form under this option:
Option ii(b): Remove all optional factors included in the definition of Reasonable Rate

Pros:

There would be no benefit to removing the optional factors in the definition of Reasonable Rate.

Cons:

Comments regarding the ongoing use of the Custom LOA form under this option:

Option iii: Offer more options than before by: Allowing an LOA filer the ability to choose whether it may seek or not seek Prohibitive Orders in accordance with the current wording of the Patent Policy; and Clarifying the optionality of the factors included in the definition of Reasonable Rate.

Pros:

We don’t see any benefits to these approaches.

Cons:

Comments regarding the ongoing use of the Custom LOA form under this option:
Option i: No change to the text of the 2015 Patent Policy

Pros:
The signatory herein, Jio Platforms Limited ('Reliance') believes that the IEEE Patent Policy 2015 ("Patent Policy") in its current form is a well-balanced policy. We note that the policy provides benefits to both patent owners and technology implementers. Reliance is of the opinion that IEEE standards have seen wide acceptance throughout the world as its Patent Policy has maintained a balanced position on the rights and interests of patent owners as well as implementers. Further, there has been no disadvantage to patent owners or implementers due to the Patent Policy. To the best of Reliance’s knowledge, no court, has declared that the Patent Policy violates any laws or the principles of natural justice. Since the Patent Policy has been well respected by courts as well as stakeholders, Reliance strongly believes that it will be highly advantageous to retain the Patent Policy in its current form.

Cons:
Since the Patent Policy provides a balanced approach towards the rights and interests of the patent owners and implementers, Reliance believes that there is no disadvantage in retaining the provisions of the Patent Policy in its current form.

Comments regarding the ongoing use of the Custom LOA form under this option:
Reliance believes that the Patent Policy is well balanced and the custom LOA form must be continued to be used in its current form. The LOA form clarifies the patent owner’s position with respect to declaration of standard essential patents and the position with respect to licensing. Thus, patent owners must continue to submit the custom LOA under the Patent Policy.

Option ii(a): Remove all of the Patent Policy provisions regarding Prohibitive Orders

Pros:
Reliance is of the opinion that the provisions regarding prohibitive orders protect the implementors against a potential abuse of privileged position by the patent holders and provide powers to the patent holders to seek prohibitive orders in certain circumstances. The Patent Policy provides a balanced approach on the issue of prohibitive orders, and thus, there are no benefits to removing the Patent Policy’s express limitations on prohibitive orders.
The Patent Policy provides the following provisions relating to prohibitive orders, the advantages of each of which have been highlighted below:

a. The Patent Policy provides a well explained definition of a ‘prohibitive order’ which includes interim or permanent injunction, exclusion order or similar adjudicative directive that limits or prevents making, using, selling, offering to sell or importing a compliant implementation. This definition ensures that any order which seeks to limit or prevent the implementation of the standard technology is covered under this definition. The removal of such provision would allow patent holders to seek prohibitive orders.

b. The Patent Policy also provides that a patent owner cannot seek a prohibitive order against an implementer should the patent owner agree to provide a license to its patents on reasonable rates. This provision preserves the rights of an implementer who implements a standard technology and is not under a continuous threat of injunction by any patent holder who may come to declare its patents as standard and essential patents. Thus, this provision encourages the implementers to incorporate a standard technology in their products and increases the overall acceptance of the IEEE standards in the industry. The success of any standard lies in the wide acceptance of the same by various stakeholders and technology implementers throughout the world. This provision aims to achieve exactly that. Should such provision be removed, the entire balance created by the Patent Policy would be disturbed. Since nothing would prevent or discourage patent owners from seeking such prohibitive orders, the removal of this provision would put them in a very dominant position that will likely be abused. It has been known that patent owners force small implementers to take a license on high royalty rates under the threat of an injunction and then use the licensed rate as a benchmark for licensing to all other implementers. Removal of the provisions relating to prohibitive orders would enhance such tactics employed by the patent owners to extort higher than reasonable royalty rates.

c. What is important to note is that the Patent Policy does not only preserve the right of the implementer (by forbidding the seeking of prohibitive orders) but also preserves the rights of the patent owners by providing some exclusions to the above rule. The Patent Policy states that prohibitive orders may be sought if the implementer fails to participate in or comply with the outcome of any adjudication by a court on determination of Reasonable Rates and other reasonable terms and conditions; adjudication of patent validity, enforceability, essentiality, and infringement; award of monetary damages; and resolution of any defenses and counterclaims. Thus, if an implementer does not participate in or comply with a court’s order, the patent owner is free to seek prohibitive orders against such unwilling implementer. This provision expressly sets forth the necessary balance between the rights of the patent owners and implementers. If this provision is also removed, the balance would be disturbed.

d. Further, national courts in many jurisdictions have upheld the intended purpose or crux of the Patent Policy and have refused to grant injunctions in SEP infringement disputes. For instance, the Courts have categorically stated that no injunction is maintainable in at least the matters of Unwired Planet v. Huawei ([2020] UKSC 37 at the UK Supreme Court, [2017] EWHC 711 Pat at the UK High Court), Sisvel v Haier (FCJ docket no. KZR 36/17 at the German Federal Court of Justice (FCJ)), Microsoft Corp. v. Motorola Inc. (696 F.3d. 872 (9th Cir. 2012) at the United States Court Of Appeals For The Ninth Circuit), Huawei v. Conversant (Case numbers (2019) Zui Gao Fa Zhi Min Zhong No.732, (2019) Zui Gao Fa Zhi Min Zhong No.733 and (2019) Zui Gao Fa Zhi Min Zhong No.734 at the Chinese Supreme Court), Optis Cellular Technology LLC vs Apple Retail UK Limited ([2019] EWHC 3538 (Pat) at the UK High Court), Philips v. OnePlus (CS(Comm) No. 574 of 2019 at the Delhi High Court), Nokia v. Lenovo (CS (comm) no. 581/2019 at the Delhi High Court), IDC v. Xiaomi (CS
(comm) no. 295/2020 at the Delhi High Court), Philips v. Vivo (CS (comm) no. 383/2020 at the Delhi High Court) and many others. Thus, removal of the provisions of prohibitive orders from the Patent Policy would also take a divergent view from the well-established SEP jurisprudence on injunctions throughout the world.

Comments regarding the ongoing use of the Custom LOA form under this option:

For standards projects that began subsequent to enforcement of the Patent Policy, all the IEEE participants should be subject to the same rules, and the custom LOA form (which was designed to keep existing rules in place for older projects) should not be permitted.

Option ii(b): Remove all optional factors included in the definition of Reasonable Rate

Pros:

The Patent Policy comprehensively defines the considerations for determination of the reasonable rates that guide licensing negotiation in a balanced direction. Reliance believes that there is no benefit of removing such optional factors in the definition of reasonable rate.
The Patent Policy is in conformance with the position taken by national courts throughout the world on what are ‘reasonable rates’. More specifically, the definition of reasonable rates in the Patent Policy includes the following considerations:

a. The value that the patent claim provides to the value of the smallest saleable compliant implementation. Reliance strongly believes that this is the correct explanation of the value of the standard technology that is part of a patent claim. The value of a technology implemented in a component must be determined based on the value the technology adds to that component and not an entire device in which the component is incorporated. Determining reasonable rates based on the value that the technology adds to the smallest saleable component that incorporates that technology, accomplishes this goal. Eliminating it, would make it more likely for patent owners to extract higher than reasonable royalties from implementers, which would gradually diminish the acceptance of standard technologies by the implementers.

b. The definition of reasonable rate also takes into consideration the value of the technology in the smallest saleable practicing unit or component in view of all the other patented technologies incorporated in said smallest saleable practicing unit or component. This provision ensures that patent owners are not able to seek royalties that would lead to royalties stacking. If a single product potentially infringes on many patents or implements a Standard, the implementer will be required to obtain a license for all those patents that may be held by different SEP owners. Often the royalties individually set by each SEP owners may add (stack) up to prohibitively high levels, and thus the implementer has to bear multiple royalty burdens. If each patent owner asks for a royalty rate that is decided independently, the implementer may wind up paying more for licenses than the actual cost of the product, thus running the risk of the product becoming unprofitable and the manufacturer ceasing to manufacture it. This provision ensures that the implementor does not land up in this position. If such a provision is removed, the patent owners would be able to ask for royalties that are independent of the value of other patented technologies incorporated in the same component, which would lead to considerably higher rates and hamper implementation of such standard technology in the devices.

c. The definition of reasonable rate under the patent policy also takes into consideration the existing licenses of a patent owner with other comparable licensees, provided such licences have not been obtained under the threat of an injunction. As discussed above, patent owners seek licenses on higher than reasonable rates from small manufacturers or implementers under the threat of injunction and then use such licences as benchmark rates for other licensees. By using such tactics, the patent owners are able to extract higher than reasonable royalty rates from all licensees, all within the ambit of comparable and reasonable rates being offered to all licensees. To stop or discourage this practice, it is imperative that the present provision relating to existing licences being taken into consideration while determining reasonable rates, is retained in its current form.

Comments regarding the ongoing use of the Custom LOA form under this option:

Reliance is of the opinion that if provisions relating to prohibitive orders and definition of reasonable rates is removed from the patent policy, the custom LOA shall become redundant. Any declaration by a patent owner to license its patent on reasonable rates would be meaningless without the definition of reasonable rates in the patent policy.
Option iii: Offer more options than before by: Allowing an LOA filer the ability to choose whether it may seek or not seek Prohibitive Orders in accordance with the current wording of the Patent Policy; and Clarifying the optionality of the factors included in the definition of Reasonable Rate.

**Pros:**

As discussed above, Reliance believes that the success of a standard technology is dependent on widespread implementation of such technology and various products. The current patent policy aims to protect the interests of the implementers and patent owners, thus leading to high adoption rates of the standard technology. Allowing the LOA filer to choose whether it may or may not seek prohibitive orders does not have any advantage, unless the Patent Policy clarifies that a standard technology will not be accepted unless the patent owner agrees to not seek prohibitive orders. Further, regarding the optionality of the factors in the definition of reasonable rate, it is already clear that such factors are only exemplary and not exhaustive. Thus, there is no further benefit to clarifying the optionality of such factors.

**Cons:**

Firstly, regarding 3(i), if the members are allowed to specify their own “rules” for compliance with the Patent Policy on whether the member will pursue a prohibitive order or not, it will result in massive amount of SEP litigations. Allowing the LOA filer to provide an option to seek or not seek prohibitive orders would only strengthen the patent owners to seek prohibitive orders and abuse their position of dominance.

Secondly, regarding 3(ii), Reliance believes that there is no need to clarify what is already clear. The Patent Policy comprehensively defines the considerations for determination of the reasonable rates, such considerations are a guiding factor for a license negotiation. Moreover, given that these considerations are of option and a non-limiting nature, the SEP holder’s are also free to rely upon additional considerations for determining a reasonable rate that are demonstrably free of any unfair discrimination to make, have made, use, sell, offer to sell, or import any Compliant Implementation that practices the Essential Patent Claims for use in conforming with the IEEE Standard. Changes to the Patent Policy text are not needed in this regard and would rather cause misperceptions than to resolve it.

**Comments regarding the ongoing use of the Custom LOA form under this option:**

a. If the LOA filer is allowed to choose whether or not it will seek a prohibitive order, the purpose of the LOA would be defeated. There will be no assurance to the implementer that it can continue to incorporate a technology in its product without being under a constant threat of closing down its business.

b. The custom LOA form already specifies the optional portions in the LOA and thus no further clarity is needed. In fact, Reliance is of the opinion that the optional portions be made mandatory.
Option i: No change to the text of the 2015 Patent Policy

Pros:

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Cons:

On March 27, 2015, our then President and CEO, Bill Merritt, wrote an open letter that was published in the EE Times (link: https://www.eetimes.com/why-we-disagree-with-the-ieee-patent-policy/), where he said, in part:

“"The IEEE voted to change its patent licensing policy. Rather than leave it to the parties to decide how royalties would be calculated, the IEEE endorses a calculation based on the value of the chip inside the device, even if many other aspects of the device benefit from or use the contributed technology. This move could slash revenues for standards developers. The IEEE also wants to make it pretty near impossible to stop someone from shipping products even if they refuse to pay a license — and that refusal will become more commonplace if there are limited means to enforce patents. So in a nutshell, they don’t want developers to be paid much, and they’ve also made it as hard as possible for them to get paid at all. It’s all very one-sided, and so was the process that led to the decision. A handful of manufacturers of devices — the people who pay for the use of the technology — essentially co-opted the IEEE patent committee. They got support from people at the Department of Justice who have never worked in this industry and are basing their thinking on economic theory rather than real-world practices. There were closed-door meetings involving a select few participants. Principles of due process, openness, and consensus were disregarded. After the decision, Qualcomm stated that it would reconsider how it participates in IEEE standards development. It will continue to do research and contribute it, but make other licensing commitments. This week, we’ve announced something very similar in a letter you can read here. We advised the IEEE that our company objects to its new patent policy and, going forward, on a case-by-case basis, will provide alternative licensing assurances to those specified in the 2015 policy. The situation is difficult for us, because we have a long and valued history with the IEEE. One of our engineers and a current member of our board of directors are IEEE Fellows, a very high honor. Our former chief scientist, Brian Kiernan, was honored with a lifetime achievement award by the IEEE, ironically for ‘outstanding skills and diplomacy, team facilitation and joint achievement, in the promotion of computer standards where individual aspirations, corporate competition, and organizational rivalry could otherwise be counter to society’s benefit.’ It is likely that other companies will soon follow suit in objecting to the new IEEE patent policy. The result is frankly a mess. Now contributions likely will be made under a myriad of licensing assurances, perhaps very different from one another."

And this is exactly what happened. Since 2015 several trillion-dollar implementer companies have emerged, the economic theory of royalty stacking has proven to be a theory not substantiated in fact, and the result is a mess of various changes to the Letter of Assurance form every 9 to 12 months to adjust for unforeseen consequences of this unfortunate change to the working pre-March 2015 Patent Policy (exemplified in the Custom LoA form for pre-March 2015 PARs).

With that introduction, I am providing this response on behalf of my employer, InterDigital, Inc. I would like to begin by thanking the Board of Governors for providing this opportunity to address the changes to the IEEE Patent Policy in 2015. At the time of the change, InterDigital expressed its concern in two separate communications, one noted above and the other was a direct letter to the then chair (and ironically current chair) of the IEEE PatCom, David Law (link here, http://wpuploads.interdigital.com.s3.amazonaws.com/uploads/2015/03/Letter-to-IEEE-SA-PatCom.pdf).

That being said, we have concerns how this “Call for Comments” will be treated by the BOG in general, but more specifically, by the IEEE-SA as a whole. We are hopeful that complete transparency is on the forefront of the minds of the decision makers and respectfully request all decisions related to this call be publicly available and subject to consensus voting.
Fundamentally, we believe the best course of action is to return to the patent policy before the change in 2015. I would note that the change was initiated by an alleged call to action by the Department of Justice under Renata Hesse in an October 2012 ITU IPR Ad hoc meeting in a presentation called “Six Small Proposals for SSOs Before Lunch.” (Link here, https://www.justice.gov/atr/file/518951/download)

The very first committee meeting in the new year (March 2013), the PatCom took Ms. Hesse’s speech as a call to action to change its patent policy, when IEEE was the only SDO that followed that course of action of all of the hundreds of standards development organizations in the world.

At a high-level, the entire definition of Reasonable Rates and all references to Prohibitive Orders raise concerns for several legal and policy reasons. For example, the Reasonable Rates definition appears to elevate a limited evidentiary principle (SSPPU) in the US to the position of applying to every IEEE SEP worldwide. Similar arguments are probably available regarding at least (i) the “value of inclusion in the standard” statement, (ii) a quasi-top-down approach that seems implied in the 2nd bullet of the Reasonable Rate definition, and (iii) the limited way the 3rd bullet of RR accepts comparable licenses.

Turning to the referenced speech as well as the DOJ BRL regarding the issue of hold-up, commentators have labelled the rationale that SEP holders have the ability to “hold-up” standards implementers as theoretical. It is in response to this unfounded risk presented by academics that the IEEE has amended its patent policies to supposedly reduce the uncertainty of F/RAND commitments. While ETSI had previously entertained this notion, since 2007, the ETSI Guide on IPRs specifically disclaims a specific definition of FRAND on grounds that “specific licensing terms and negotiations are commercial issues between companies and shall not be addressed within ETSI.” Most other SDO have similar disclaimers, while IEEE becomes the first major SDO to take it upon themself to define and thus limit F/RAND licensing terms, a move that completely deviates from neutrality, thus favoring licensees over SEP owners.

As other commentators have addressed, patent “hold-up” driving the IEEE’s policy change is not an issue for practical reasons. For example, standardization is often a repeat-player game; if a patent holder acts in an unfair manner, it is unlikely that other companies will be willing to urge adoption of the patent holder’s technology in future standard setting proceedings. If the patent holder engages in unfair negotiations with implementers, the implementers may hold SEPs that the patent holder needs to cross license. The implementer may also be an important player in the field for commercializing the patent holder’s technology. All these factors serve to deter what is perceived as patent hold-up.

IEEE’s March 2015 “reasonable Rate” definition has the effect of lowering royalties based on the value of the smallest saleable standard-compliant implementation that practices an essential patent claim. This move by the IEEE appears to occur on the heals of the Ericson v. D-Link ruling (2014) where the court rejected a defendant’s argument the existing IEEE licensing assurance obligated “smallest saleable” chip-level licensing. Indeed, IEEE’s 2015 policy change came about two months after the CAFC’s decision under the IEEE’s prior policy.

The 2015 Policy went even further by restricting the availability of injunctive relief, which only increases patent hold-out, where the implementer can drag out infringing activity while delaying licensing negotiations, especially since the implementer is to a large extent shielded from receiving a court order prohibiting any further alleged infringing activities until the matter is resolved.

Patent holders contributing to SDOs create cutting edge technologies that facilitate interoperability and interconnectivity between the devices using the standard. Different manufacturers (implementers) can develop competing devices that work together. Smartphones incorporating IEEE 802.11 Wifi
standards are but one example. The IEEE’s defining of the Reasonable Rate resulting in a lowering of royalties, coupled with the limitations of seeking injunctive relief with the effect of increased hold-out, will ultimately reduce some R&D and corresponding contributions with a net result of slowing down the innovative pace and quality attributed by SDO activities and that the policy change has led to confusion and differing licensing assurances.

Comments regarding the ongoing use of the Custom LOA form under this option:

There are no benefits to the use of the Custom LOA form under this option. To begin, it is limited to pre-2015 projects, hence not useful and does not address concerns above. Further as I explained above, this form exacerbates the licensing mess sincere there are not the exact same terms/definitions from the pre 2015 policy, leading to some confusion. Also there is a lack of clarity on exactly which conditions are applicable for these Custom LOAs (pre-2015 policy? A mix of pre and post 2015 policy?).

Option ii(a): Remove all of the Patent Policy provisions regarding Prohibitive Orders

Pros:

This is a good and necessary start, but any satisfactory solution also needs to remove the entire definition of Reasonable Rate and return the IEEE to the pre-March 2015 policy change that created this mess, as InterDigital foresaw six (6) years ago. Indeed, we do support the removal of all of the Patent Policy provisions regarding prohibitive orders.

Cons:

I believe this is a good start, and certainly an improvement but not good enough on its own. InterDigital’s preference is to return to the pre-March 2015 policy. Unfortunately, the problem is if this was accomplished, how would IEEE address the projects that are in between 2015 and the “new upcoming policy”? Retroactive changes should be avoided as it creates confusion. Regardless, what is preferred is a return to the pre-March 2015 policy.

Comments regarding the ongoing use of the Custom LOA form under this option:

I believe this is a good start, and certainly an improvement but not good enough on its own. InterDigital’s preference is to return to the pre-March 2015 policy. Unfortunately, the problem is if this was accomplished, how would IEEE address the projects that are in between 2015 and the “new upcoming policy”? Retroactive changes should be avoided as it creates confusion.
Option ii(b): Remove all optional factors included in the definition of Reasonable Rate

Pros:

This is a good and necessary start, but any satisfactory solution needs to remove the entire definition of Reasonable Rate as well as all references to Prohibitive Orders.

Further, consideration should be taken to remove the pre-amble of the Reasonable Rate definition prior to the 3 items for consideration, the value defining language (e.g., "appropriate compensation" and "excluding the value…resulting from the inclusion") should also be removed from the definition of Reasonable Rate and instead IEEE should rely on private parties to determine commercial terms where appropriate.

Cons:

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Comments regarding the ongoing use of the Custom LOA form under this option:

“Not Applicable” as the Custom LOA does not address Prohibitive Orders or Reasonable Rates as either is defined and understood in the March 2015 Patent Policy change.

Option iii: Offer more options than before by: Allowing an LOA filer the ability to choose whether it may seek or not seek Prohibitive Orders in accordance with the current wording of the Patent Policy; and Clarifying the optionality of the factors included in the definition of Reasonable Rate.

Pros:

Given the options are grouped by an “and”, there are no Pro’s for this Option iii.

Cons:

To begin, I believe the BOG, and by extension PatCom, believes the only two issues worth addressing are (1) Prohibitive Orders and (2) clarifying the optionality of the factors, both of which illustrate a misunderstanding of the impact the radical changes IEEE approved in 2015. To begin, as explained above, simply defining the term Reasonable Rate meant that IEEE believed it was in a place wherein it needed to construe licensing terms most favorable to potential implementers of its standard and deliberately moved away from being business model neutral. Simply put the issue of Prohibitive Orders is not the only defined term that should be removed.

Furthermore, “clarifying the optionality of the factors” does nothing to the factors themselves other than address when/if they are applicable for a given situation. The three factors remain in the definition of Reasonable Rate. Also “clarification” is a way to make changes retroactive. A patent policy change should not be disguised in a “clarification” with retroactive effect. These three factors should be removed along with the defined term Reasonable Rate.
Comments regarding the ongoing use of the Custom LOA form under this option:

| “Not Applicable” as the Custom LOA does not address Prohibitive Orders or Reasonable Rates as either is defined and understood in the March 2015 Patent Policy change. |
Option i: No change to the text of the 2015 Patent Policy

Pros:

This is clearly the best and only reasonable option. The 2015 policy was approved in a robust procedure by votes at all levels of IEEE. Importantly, it’s necessary to recognize that the 2015 policy was an extension and clarification of prior policy and philosophy. It is the opponents on this policy who are arguing for a dramatic change in direction, and they have offered no credible reason for such a shift, for adopting new policies so directly contrary to FRAND principles, or for making any change at all to the 2015 policy. Unlike the IPR policies of many SDOs, the 2015 is actually clear. Regressing from the 2015 policy to again embrace ambiguity and dysfunction would be a profound mistake.

Cons:

None

Comments regarding the ongoing use of the Custom LOA form under this option:

None

Option ii(a): Remove all of the Patent Policy provisions regarding Prohibitive Orders

Pros:

There are none

Cons:

Allowing SEP owners to seek a prohibitive order against a licensee is fundamentally inconsistent with the concept of FRAND. Prescribing prohibitive orders is absolutely necessary to the proper functioning of the FRAND system and must remain part of the the IEEE policy.

Comments regarding the ongoing use of the Custom LOA form under this option:

None
Option ii(b): Remove all optional factors included in the definition of Reasonable Rate

Pros:

None

Cons:

The policy currently provides appropriate clarity and predictability for FRAND licensing. Abandoning that clarity would have only negative effects and would enable SEP owners to engage in holdup. Removing the definition of a reasonable rate would harm implementers and undermine their ability to participate in IEEE standardization activities.

Comments regarding the ongoing use of the Custom LOA form under this option:

Option iii: Offer more options than before by: Allowing an LOA filer the ability to choose whether it may seek or not seek Prohibitive Orders in accordance with the current wording of the Patent Policy; and Clarifying the optionality of the factors included in the definition of Reasonable Rate.

Pros:

None

Cons:

The 2015 policy should be left intact and as it is. Increasing the difficulty, ambiguity, and opacity of licensing -- as these additional options would do -- is directly contrary to FRAND itself and would constitute an unwise and harmful action by the IEEE.

Comments regarding the ongoing use of the Custom LOA form under this option:
Option i: No change to the text of the 2015 Patent Policy

Pros:

<table>
<thead>
<tr>
<th>Keeping the 2015 Patent Policy text offers no pros for IEEE-SA or IEEE-SA standards. While the 2015 policy suits the business model of a subset of companies it has compromised, and continues to compromise, IEEE-SA’s standards, reputation, interests, and international standing.</th>
</tr>
</thead>
</table>
Cons:

Broad data from 2015-2021 demonstrate the myriad direct negative effects of the 2015 patent policy on IEEE-SA standards, standing and reputation. They include the following:

First, The vast majority of LOA filers have consistently rejected the 2015 patent policy. RAND assurances are voluntary, and more than three quarters (3/4) of LOA filers chose to reject the 2015 policy between 2016-2021. For example, DOJ's September 2020 letter to IEEE reveals that 77% of LOAs on IEEE 802.11 standards between 2016-2019 were negative LOAs, see https://www.justice.gov/atr/page/file/1315291/download. And LOA statistics for the first nine and half months of 2021 show that three quarters (¾) of all LOA filers (18 of 24) opted not to provide assurances under the radical terms of the 2015 patent policy. Open standards rely on RAND assurances and, therefore, this situation directly compromises the quality of IEEE-SA standards and also demonstrates wholesale rejection of the 2015 policy. Such phenomenon was not observed prior to March 2015.

Filers of LOAs who rejected the 2015 patent policy in their LOAs include (in alphabetical order): Alcatel Lucent, Cooper Power Systems, Ericsson, Fraunhofer Institute for Integrated Circuits, General Electric, Huawei Technologies Company Ltd., InterDigital Inc., Koninklijke KPN, KT Corporation, LG Electronics, MediaTek Inc., NEC Corporation, Nokia, Orange, Panasonic, Philips, SK Telecom Co. Sony Corporation, Symbyon Systems and WILUS Institute of Standards and Technology Inc. In addition, according to the LOA database, Qualcomm did not submit any LOAs under the 2015 patent policy.

Second, IEEE 802.11 standards amendments lost ANSI American National Standards (ANS) seal of approval. As a result of negative LOAs, in March 2019 ANSI declined to approve IEEE 802.11ah and 802.11ai as American National Standards. In addition, in 2021, all remaining IEEE 802.11 standards amendments were withdrawn as ANSs or removed from the ANSI Project Initiation Notification System list. This reality is unprecedented and was not observed prior to March 2015.

Third, media reports suggest that, moving forward, IEEE 802.11 standards are losing ISO International Standards status due to the negative LOAs reality. Recent examples include IEEE 802.11ax and 802.11ay.

Fourth, a large number of policy makers and legislators, on both sides of the Atlantic and on both sides of the political aisle, have raised concerns about the imbalance of the 2015 patent policy. This causes ongoing reputational damage.

Fifth, since the 2015 patent policy took effect, it was revised at least six (6) more times through multiple changes to the LOA form, FAQs text, introduction of a 2nd parallel LOA form and through stand-alone executive session resolutions. The need for these repeated follow-on revisions demonstrates the ongoing failure of the policy. By contrast, the 2007-2015 patent policy, that was a consensus policy developed through an open process, worked smoothly for nearly 8 years without any need follow-on revisions attempting to fix it. This consultation is testament to the fact that in 2021, over six years after its adoption, the 2015 patent policy revisions still do not work for IEEE-SA.

Sixth, the imbalanced non-consensus nature of the 2015 patent policy is evident by the polarized responses to this call for comments.

Finally, the 2015 policy was developed through a flawed process that also lacked a meaningful appeals process, and the 2021 change in administration does not remedy this problem. In a
September 2021 speech, the DOJ Antitrust Division Chief economist cited the OMB requirement for SDOs to “take steps to ensure that the standards-development process is “open to interested parties,” balanced, and consensus based, and that SDOs’ procedures provide for due process and appeals” and noted that “SEPs are an important part of the standards ecosystem”. The speech also suggested that, unlike the 2015 patent policy, it appears that current antitrust division’s policy prefers “not to favor—or be perceived to favor—particular stakeholders or business interests”


Comments regarding the ongoing use of the Custom LOA form under this option:

On 8/29/2019 I submitted comments pointing out flaws in the Custom LOA form, and suggested corrections to same. I hereby incorporate these comments by reference. I also incorporate by reference comments I posted on PP-Dialog on 8/26/2019 that highlighted that the 14 March 2021 FAQ text should be referenced in the Custom LOA and that all the 14 March 2015 materials (policy, Manual, FAQs etc.) need to be posted and embedded in the form see https://grouper.ieee.org/groups/pp-dialog/email/msg00554.html. Regrettably, none of these comments were accepted, and the Custom LOA remains flawed.

Ideally, it would be best for IEEE-SA and its standards to bring back into use the LOA form version that was in effect on March 14, 2015 *instead* of the 2019 Custom LOA form along with removal of all the 2015 policy changes and removal of the LOA form version that is in use today (October 2021).
Option ii(a): Remove all of the Patent Policy provisions regarding Prohibitive Orders

Pros:

As explained before in my response to “Option i” the 2015 patent policy brought about myriad direct negative effects bearing on IEEE-SA standards, standing and reputation.

Since proposal ii(a) suggests removing some of the 2015 patent policy changes, the suggestion is positive in the sense that it should bring the policy closer to the 2007-2015 patent policy that was developed in an open consensus process and functioned smoothly.

Ideally, such removal would be part of removal of all 2015 policy changes, and especially lines 19-20 and lines 100-109 because these lines still reference “Prohibitive Order” language as well as “Compliant Implementation” language that is one of the major differences put in place on March 15, 2015. If the goal of this evaluation is to choose the best route for IEEE-SA standards, interests and reputation, then these lines should also be removed. The line numbers referenced in this paragraph are taken from the redline showing all 2015 policy changes at https://grouper.ieee.org/groups/pp-dialog/drafts_comments/SBBBylaws_100614_redline_current.pdf

Note that courts in the U.S. and overseas have repeatedly rejected arguments for law and policies re “Prohibitive Orders”, “Reasonable Rate” and “Compliant Implementation” that are akin to the ones included in the 2015 policy revisions. See summary of U.S. law on pages 2-9 of the September 2020 DOJ Letter to IEEE https://www.justice.gov/atr/page/file/1315291/download; Court of Appeals for the 5th Cir. decision in HTC v. Ericsson (2021) available at https://www.ca5.uscourts.gov/opinions/pub/19/19-40566-CV0.pdf (rejecting smallest-saleable-unit royalty methodology). Hence, retaining the Prohibitive Orders language results in a patent policy that is inconsistent with the law on both sides of the Atlantic.

Cons:

There are no cons for IEEE-SA in removing the ‘Prohibitive Order’ language.

Comments regarding the ongoing use of the Custom LOA form under this option:

On 8/29/2019 I submitted comments pointing out flaws in the Custom LOA form, and suggested corrections to same. I hereby incorporate these comments by reference. I also incorporate by reference comments I posted on PP-DIALOG on 8/26/2019 that highlighted that the 14 March 2021 FAQ text should be referenced in the Custom LOA and that all the 14 March 2015 materials (policy, Manual, FAQs etc.) need to be posted and embedded in the form see https://grouper.ieee.org/groups/pp-dialog/email/msg00554.html. Regrettably, none of these comments were accepted, and the Custom LOA remains flawed.

Ideally, it would be best for IEEE-SA and its standards to bring back into use the LOA form version that was in effect on March 14, 2015 *instead* of the 2019 Custom LOA form along with removal of all the 2015 policy changes and removal of the LOA form version that is in use today (October 2021).
Option ii(b): Remove all optional factors included in the definition of Reasonable Rate

Pros:

As explained before in my response to "Option i," the 2015 patent policy brought about myriad direct negative effects bearing on IEEE-SA standards, standing and reputation.

Since proposal ii(b) suggests removing some of the 2015 patent policy changes, the suggestion is positive in the sense that it would bring the policy closer to the 2007-2015 patent policy that was developed in an open consensus process and functioned smoothly.

Cons:

There are no cons for IEEE-SA in removing that language.

Comments regarding the ongoing use of the Custom LOA form under this option:

On 8/29/2019 I submitted comments pointing out flaws in the Custom LOA form, and suggested corrections to same. I hereby incorporate these comments by reference. I also incorporate by reference comments I posted on PP-Dialog on 8/26/2019 that highlighted that the 14 March 2021 FAQ text should be referenced in the Custom LOA and that all the 14 March 2015 materials (policy, Manual, FAQs etc.) need to be posted and embedded in the form see https://grouper.ieee.org/groups/pp-dialog/email/msg00554.html. Regrettably, none of these comments were accepted, and the Custom LOA remains flawed.

Ideally, it would be best for IEEE-SA and its standards to bring back into use the LOA form version that was in effect on March 14, 2015 instead of the 2019 Custom LOA form along with removal of all the 2015 policy changes and removal of the LOA form version that is in use today (October 2021).

Option iii: Offer more options than before by: Allowing an LOA filer the ability to choose whether it may seek or not seek Prohibitive Orders in accordance with the current wording of the Patent Policy; and Clarifying the optionality of the factors included in the definition of Reasonable Rate.

Pros:

There are no cons for IEEE-SA or its standards in choosing this option.
Cons:

The legal default, protected under the U.S. Constitution’s Noerr-Pennington doctrine, is that parties may seek redress in U.S. courts and tribunals, including the seeking of Prohibitive Orders. It was wrong for IEEE-SA’s 2015 patent policy to take a path that denies U.S. constitutional protections, and the negative implications of this choice are abundant.

I do not believe an attempt to clarify optionality would address the failure of the 2015 patent policy. Rather, it may introduce confusion within the IEEE standards eco-system as a whole due, for example, to the ‘reciprocity’ option in the LOA form. If the scope of the commitment is not clear, this could lead to disincentives to invest in standards development or commercialization of the standard.

Comments regarding the ongoing use of the Custom LOA form under this option:

On 8/29/2019 I submitted comments pointing out flaws in the Custom LOA form, and suggested corrections to same. I hereby incorporate these comments by reference. I also incorporate by reference comments I posted on PP-DIALOG on 8/26/2019 that highlighted that the 14 March 2021 FAQ text should be referenced in the Custom LOA and that all the 14 March 2015 materials (policy, Manual, FAQs etc.) need to be posted and embedded in the form see https://grouper.ieee.org/groups/pp-dialog/email/msg00554.html. Regrettably, none of these comments were accepted, and the Custom LOA remains flawed.

Ideally, it would be best for IEEE-SA and its standards to bring back into use the LOA form version that was in effect on March 14, 2015 “instead” of the 2019 Custom LOA form along with removal of all the 2015 policy changes and removal of the LOA form version that is in use today (October 2021).
Option i: No change to the text of the 2015 Patent Policy

Pros:

2015 Patent Policy provides stability and foreseeability for the use of IEEE standards, reduces disputes for the use of the standards, serves for the public interest through wider adoption of the standards in the society and thus promotes competition.

Cons:

We see no particular downside in maintaining 2015 Patent Policy.

Comments regarding the ongoing use of the Custom LOA form under this option:

For standard projects initiated after adoption of the 2015 Patent Policy, the custom LOA form should not be permitted.

Option ii(a): Remove all of the Patent Policy provisions regarding Prohibitive Orders

Pros:

We see no benefits in removing all of the Patent Policy provisions regarding Prohibitive Orders.

Cons:

Removing the Patent Policy provisions regarding Prohibitive Orders would get the use of IEEE standards unstable and unforeseeable, thus harm the interest of users, society and eventually contributors. The use of injunctions or similar prohibitive orders against IEEE standards would run against IEEE’s intrinsic value of serving for the public interest.

2015 Patent Policy has fairly struck the balance between the interest of SEP holders that seek reasonable compensation and the interests of users of IEEE standards free from abusive demands and tactics.

Comments regarding the ongoing use of the Custom LOA form under this option:

For standard projects initiated after adoption of the 2015 Patent Policy, the custom LOA form should not be permitted.
Option ii(b): Remove all optional factors included in the definition of Reasonable Rate

**Pros:**

We see no benefits in removing all of optional factors in the definition of reasonable rate.

**Cons:**

Removing these factors would give opportunistic SEP holders a chance to make abusive claims on the value of their self-declared SEPs and, if combined with threats of unfairly sought injunctive relieves, could have users of IEEE standards cave in the SEP holders' excessive demand of royalties. Users of IEEE standards would be in trouble and the objective of IEEE promoting wider use of the standards would be jeopardized.

**Comments regarding the ongoing use of the Custom LOA form under this option:**

For standard projects initiated after adoption of the 2015 Patent Policy, the custom LOA form should not be permitted.

Option iii: Offer more options than before by: Allowing an LOA filer the ability to choose whether it may seek or not seek Prohibitive Orders in accordance with the current wording of the Patent Policy; and Clarifying the optionality of the factors included in the definition of Reasonable Rate.

**Pros:**

We see no benefits in these options.

**Cons:**

As for 3(i), allowing injunctive relief optionally has the same problem as described in our response 2(a) for wide stakeholders of the IEEE standards.

As for 3(ii), we find no particular necessity to further clarify these factors, since they are already well addressed in the current policy.

**Comments regarding the ongoing use of the Custom LOA form under this option:**

For standard projects initiated after adoption of the 2015 Patent Policy, the custom LOA form should not be permitted.
Option i: No change to the text of the 2015 Patent Policy

Pros:

Nokia would not support this option. While this course of action would involve no further action by IEEE, electing this path of least resistance would not be in the long-term interests of IEEE, for the many reasons outlined in the cons section below.
Cons:

Nokia was, and remains, strongly opposed to the changes IEEE made to its Patent Policy in 2015. In Nokia’s view, speaking both as a past contributor of innovative technologies to IEEE’s standards and as a manufacturer whose products employ IEEE standards, the IEEE Patent Policy that existed prior to 2015 appropriately balanced the interests of both patent holders and technology implementers. That earlier version of the Patent Policy encouraged both development and use of IEEE’s standards, creating a successful and sustainable ecosystem that worked to the overall benefit of consumers and participants in the 802.11 ecosystem.

Unfortunately, the Patent Policy changes made in 2015 were biased in favor of implementers. The changes made then, and now partly being re-evaluated per the BoG directive, aimed to drive down the licensing royalties owed for patented technology contributed to IEEE’s standards. It was our position then, and remains our position now, that the 2015 revisions were unnecessary and harmful to IEEE as they disincentivize patent holders from allowing use of their technology in IEEE standards under the newly introduced Patent Policy terms. Indeed, this fear was realized in the years after the 2015 Patent Policy revision when increasing numbers of patent holders began refusing to license their patents under the new Patent Policy requirements. To illustrate, since the 2015 Patent Policy changes were made, Nokia has filed only “negative” Letters of Assurance for licensing accompanied by an explanation that licenses are available under the terms of the pre-2015 Patent Policy, but not under the current Patent Policy. Likewise, over the years since the 2015 changes, roughly 75% (!) of the licensing assurances submitted to IEEE have refused to license under the new Patent Policy (see https://www.kidonip.com/iot-and-patent-wars/new-empirical-data-demonstrates-continued-failure-of ieee-2015-patent-policy/). As you will know, negative assurances have come from significant technology contributors like Nokia, Ericsson, Huawei, Panasonic, Orange, KPN, Inter-Digital, the Fraunhofer Institute and GE, with numerous others additionally choosing to license only under the pre-2015 Patent Policy using the “custom LOA form”. No other standards organization of which we are aware has received so many negative licensing assurances in such a short space of time.

The IEEE Patent Policy changes under review also have proven out of step with law and policy that has developed since 2015, both in the United States and abroad. In the U.S., multiple cases (CSIRO v. Cisco, Ericsson v. D-Link, Ericsson v. HTC and FTC v. Qualcomm) have made clear that royalty calculation models do not require use of the smallest saleable unit concept that IEEE’s Patent Policy promotes. Indeed, numerous courts and government authorities here and abroad have based SEP royalties on the value of a whole end user device or some other criteria (e.g. a per unit price) – but not on a device’s component parts. Some notable decisions outside the U.S. include, for example: Unwired Planet v. Huawei in the UK, Nokia v. Daimler in Germany, Archos v. Philips in the Netherlands, Ericsson v. Intex in India, and Chinese regulatory authorities in their antitrust settlement agreement with Qualcomm concerning licensing practices.

Likewise, for Prohibitive Orders, the DOJ, PTO and NIST issued in late 2019 revised guidance on the enforcement of standards essential patents clarifying that such patents should be treated no differently than any other patents when it comes to a patentee seeking injunctive relief. While the Biden Administration is evaluating that guidance anew, the guidance document notably has not been withdrawn in the interim. In fact, a senior DOJ Antitrust official stated on September 29 that “no policy statement should favor -- or be perceived to favor -- particular stakeholders or business interests.” The prohibitive order requirements in the current IEEE Patent Policy, however, do favor standards implementers, as they place a higher burden on a technology-contributing patent holder than would otherwise be required for a non-SEP under the U.S. Supreme Court’s eBay v. MercExchange standard. Likewise, in recent years, European and Chinese courts have also established that injunctions are available to SEP holders, for example where an unwilling licensee refuses a FRAND
offer of the patent holder (representative decisions include Huawei v. ZTE from the European Court of Justice, Unwired Planet v. Huawei from the UK Supreme Court, Ericsson v. iBall from India and Iwncomm v. Sony from the Beijing IP Court).

Considering the current state of the law, and in light of the supplement to the BRL, the most clean-cut and consistent course of action that IEEE could take would be to revert to the Patent Policy text that existed immediately prior to the 2015 changes. This would be an elegant solution in its simplicity and is inherently uncontroversial. It would address the concerns raised by the DOJ and would be straightforward for IEEE to implement immediately. This course of action would be preferred by Nokia, and also we expect by most other opponents of the 2015 policy amendments.

Moreover, such a reversion would be in the best interests of IEEE and its members. The pre-2015 Patent Policy favored no particular companies or business models and allowed for the widest possible participation in the development of IEEE standards. That, in turn, had enabled IEEE to see contributions of cutting-edge technologies that made some of its standards attractive and ubiquitous. This will not likely continue under the current Patent Policy or any modification limited to the BoG directive, as anything less than reversion to the pre-2015 Patent Policy prevents technology contributors from obtaining, through patent licensing, the reasonable return they require (and in other fora are entitled to) on their research and development investments that fuel contributions.

Comments regarding the ongoing use of the Custom LOA form under this option:

If IEEE unfortunately were to make no changes to the 2015 Patent Policy, then it would be sensible to continue use of the Custom LOA form to allow that option to those parties who meet the conditions and wish to continue licensing under the pre-2015 Patent Policy. But the creation and use of this option only serves to indicate the incongruous nature of the 2015 Patent Policy changes to a significant population of IEEE contributors, and should serve as a red flag to the BoG of the unbalanced nature of the changes. It was, and continues to be, a tacit omission by IEEE that it had alienated some members for the benefit of others, and a transparent attempt to simply avoid the bad publicity and negative repercussions of the numerous negative LOAs that resulted from the 2015 changes. The limited usefulness of this custom LoA can only be sustained by eliminating the requirement that it can only be used for projects initiated before March of 2015 when the subject Patent Policy changes took effect.
### Option ii(a): Remove all of the Patent Policy provisions regarding Prohibitive Orders

**Pros:**

Of the 3 options presented, Nokia would support this option together with option ii(b). As mentioned in option (i), we believe that the Policy changes implemented in 2015 have been harmful to IEEE by discouraging the contribution of innovative technologies to its standards. The large number of negative LoAs following these changes have led to uncertainties regarding access to IEEE’s standards. This in turn has led to concerns being expressed in both ANSI and ISO regarding the status of IEEE’s standards. While this option (ii)(a) would be a step in the right direction, Nokia’s view is that the simplest and most prudent course of action would be to revert to the IEEE pre-2015 Patent Policy.

The current Patent Policy effectively prohibits injunctive relief, given that a patent holder may not even seek a Prohibitive Order until the appeal of any original decision has been completed. Given the shorter and shorter product life cycles in the electronics space, and the longer and longer times for legal dispute resolution, an accused infringer will, by the time of an appeal's resolution, more than likely have stopped production and sale of accused products anyway. With no threat of an injunction there is limited or no opportunity to obtain a license from bad faith actors.

Under such conditions, standards implementers are free to hold out indefinitely from taking required SEP licenses. They know in the end that they will likely at worst pay only the license fees they would have paid as back damages for one or two patents, in but one or two jurisdictions. This will not likely offset the benefits they accrued in delaying their payment. Damages in such a situation for just one or two SEPs (which are typically licensed as part of a larger portfolio of related SEPs) may not even compensate for the litigation costs (including appeals) for seeking such damages in the first place – making the patent rights, as a matter of fact, valueless. Furthermore, such bad faith actors would enjoy a benefit in comparison to their good faith competitors who tried to "do the right thing" and pay for needed licenses. It is for all these reasons that the true availability of Prohibitive Orders must be maintained for technology contributors in order to maintain value in IEEE SEPs and to level the playing field among implementers of IEEE standards as well as SEP holders and contributors to IEEE standards.

Considering the current state of the law, and in light of the supplement to the BRL that precipitated this review, regarding which we refer you to our comments in option (i), the most clean-cut and consistent course of action that IEEE could take would be to revert to the Patent Policy text that existed immediately prior to the 2015 changes. This would be an elegant solution in its simplicity and is inherently uncontroversial. It would address the concerns raised by the DOJ and would be straightforward for IEEE to implement immediately. As mentioned, this course of action would be preferred by Nokia, and also we expect by most other opponents of the 2015 policy amendments. Moreover, such a reversion would be in the best interests of IEEE. The pre-2015 Patent Policy favored no particular companies or business models and allowed for the widest possible participation in the development of IEEE standards. That, in turn, enabled IEEE to see contributions of cutting-edge technologies that made some of its standards attractive and ubiquitous. This will not likely continue under the current Patent Policy or any modification limited to the BoG directive, as anything less than reversion to the pre-2015 Patent Policy prevents technology contributors from obtaining, through patent licensing, the reasonable return they require on their research and development investments that fuel innovative contributions.
**Cons:**

<table>
<thead>
<tr>
<th>Cons: We do not believe there would be any cons to this choice. However, for the reasons detailed here and for the other presented options, we do not support the idea that this should be the sole change made to the 2015 Patent Policy. If this change is made, there may be some limited administrative difficulty as different requirements of the Patent Policy will apply depending on when a licensing assurance was made, but this has always been the case and indeed was a concern first created by the 2015 changes (and would have occurred in any event upon any significant transitions from one version of the policy to another). As long as accurate records are maintained of declarations/assurances (most notably with respect to the dates received by IEEE), then this should not be an impediment.</th>
</tr>
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**Comments regarding the ongoing use of the Custom LOA form under this option:**

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</tr>
</thead>
</table>
Option ii(b): Remove all optional factors included in the definition of Reasonable Rate

Pros:

Of the 3 options presented, Nokia would support this option together with option ii(a). As mentioned in option (i), we believe that the Policy changes implemented in 2015 have been harmful to IEEE by discouraging the contribution of innovative technologies to its standards. The large number of negative LoAs following these changes have led to uncertainties regarding access to IEEE’s standards. This in turn has led to concerns being expressed in both ANSI and ISO regarding the status of IEEE’s standards. While this option (ii)(b) would be a step in the right direction, Nokia’s view is that reverting the IEEE patent policy to what it was prior to the 2015 changes remains to the simplest and most prudent course of action.

The 2015 IEEE Patent Policy changes with respect to the definition of Reasonable Rate have proven to be consistently out of step with law and policy, including in the US, Europe and Asia, as noted in our comments in option (i). While some commentators have suggested that no change needs to be made here because the Reasonable Rate factors under discussion are merely optional, this ignores the significance that comes from identifying specific factors and not others. As any lawyer should know, such factors may be used by courts as guidance as to the intentions of the parties in any contractual dispute. The current factors identified therefore serve as an attempt to depress royalty rates, especially when there are no parallel factors that might condition a decision-maker to an opposite conclusion. This is not the balance that the DOJ (under the current or prior Administrations) has identified as a goal for SDO patent policies. It also runs contrary to the expectations of standards bodies under anti-trust laws and set out in the WTO’s Technical Barriers to Trade.

Considering the current state of the law, and in light of the supplement to the BRL, regarding which we refer you to our comments in option (i), the most clean-cut and consistent course of action that IEEE could take would be to revert to the Patent Policy text that existed immediately prior to the 2015 changes. This would be an elegant solution in its simplicity and is inherently uncontroversial. It would address the concerns raised by the DOJ and would be straightforward for IEEE to implement immediately. As mentioned, this course of action would be preferred by Nokia, and also we expect by most other opponents of the 2015 policy amendments. Moreover, such a reversion would be in the best interests of IEEE. The pre-2015 Patent Policy favored no particular companies or business models and allowed for the widest possible participation in the development of IEEE standards. That, in turn, enabled IEEE to see contributions of cutting-edge technologies that made some of its standards attractive and ubiquitous. This will not likely continue under the current Patent Policy or any modification limited to the BoG directive, as anything less than reversion to the pre-2015 Patent Policy prevents technology contributors from obtaining through patent licensing the reasonable return they require on their research and development investments that fuel innovative contributions.
Cons:

As with option ii(a), we do not believe there would be any cons to this choice. However, for the reasons detailed here and for the other presented options, we do not support the idea that this should be the sole change made to the 2015 Patent Policy. If this change is made, there may be some limited administrative difficulty as different requirements of the Patent Policy will apply depending on when a licensing assurance was made, but this has always been the case and indeed was a concern first created by the 2015 changes (and would have occurred in any event upon any significant transitions from one version of the policy to another). As long as accurate records are maintained of declarations/assurances (most notably with respect to the dates received by IEEE), then this should not be an impediment.

Comments regarding the ongoing use of the Custom LOA form under this option:

If IEEE were to make solely this change to the 2015 Patent Policy, then it would be sensible to continue use of the Custom LOA form to allow that option for those parties who meet the conditions and wish to continue licensing under the pre-2015 Patent Policy. Numerous other objectionable changes were made to the Patent Policy in 2015 and all of those changes should be reversed. Unless and until this occurs, patent holders should be able to continue licensing under the terms and conditions of the pre-2015 policy to the maximum extent possible.

Option iii: Offer more options than before by: Allowing an LOA filer the ability to choose whether it may seek or not seek Prohibitive Orders in accordance with the current wording of the Patent Policy; and Clarifying the optionality of the factors included in the definition of Reasonable Rate.

Pros:

As to the Prohibitive Orders option, we are confused by it. The option would seem to already exist as an LOA filer currently has only two choices -- (a) seek a Prohibitive Order per the terms of the current Patent Policy or (b) do not -- and this option seems to simply restate that. Or is the option meant to suggest that any LOA filer would have the ability to simply opt out of the normal restrictions imposed for seeking Prohibitive Orders? If that were the case, then Nokia would support that for all the reasons explained with respect to option ii(a). In such situation however, Nokia would support IEEE going farther and allowing an LOA filer to instead choose which entire version of the IEEE Patent Policy it wishes to utilize, meaning that a patent holder could provide a formally recognized licensing assurance, for example, under the pre-2015 Patent Policy.

As to clarifying the optionality of the factors included in the definition of Reasonable Rate, Nokia does not support this because it is insufficient. For the reasons explained previously on the Option ii(b) worksheet, the smallest saleable patent practicing unit concept should not be employed here and labeling it as "optional" is misleading and erroneous when it is inconsistent with U.S. legal precedent and a concept not employed outside of certain U.S. jury trial situations.

Cons:

Please see Option iii "Pros" section above for relevant comments.
Comments regarding the ongoing use of the Custom LOA form under this option:

If IEEE were to make one or more or both of these changes to the 2015 Patent Policy, then it would be sensible to continue use of the Custom LOA form to allow those parties who wish and meet the conditions to continue licensing under the pre-2015 Patent Policy that option. Numerous other objectionable changes were made to the Patent Policy in 2015 and all of those changes should be reversed. Unless and until this occurs, patent holders should be able to continue licensing under the terms and conditions of the pre-2015 policy to the maximum extent possible.
Option i: No change to the text of the 2015 Patent Policy

Pros:

The 2015 IEEE patent policy is helpful in achieving a successful standard, both during standard-setting and in the marketplace. By balancing the interests of SEP holders and those using SEPs as part of innovative products incorporating a standard, the patent policy helps to limit disputes over SEPs. It also helps provide clarity to those who participate in the process as to how SEP licensing will be handled while avoiding serious problems such as patent holdup. The 2015 policy mitigates opportunistic behavior in the licensing of SEPs while providing a fair return to SEP holders, and as a result, IEEE standard setting activities have thrived since the introduction of the policy. CCIA members participate in a variety of standard setting environments and find the IEEE policy overall a positive for standards development; it increases marketplace competition and the innovation that derives from such competition.

Cons:

CCIA is unaware of any reason to eliminate the 2015 patent policy.

Comments regarding the ongoing use of the Custom LOA form under this option:

The Custom LOA form should remain available for SEPs that cover projects that were both initiated prior to the effective date of the 2015 Patent Policy and where the relevant aspect of the standard was adopted prior to that date. A patent owner should not be permitted to use the Custom LOA for an SEP that involves technology that was contributed to a standard after the effective date of the patent policy, even if the project itself was initiated prior to that date; to do otherwise would give long-term participants in a long-running project an advantage over new entrants and would likely disincentivize new innovators from participating in projects as a result.

Option ii(a): Remove all of the Patent Policy provisions regarding Prohibitive Orders

Pros:

There is no benefit to removing the prohibitive order limitation.
SEP owners are entitled to reasonable compensation for the use of their patents. The IEEE 2015 Patent Policy's bar on prohibitive orders ensures that reasonable compensation can be obtained, but that a patent owner cannot obtain compensation that is derived from the value of the standard as a whole, the value created by the contributions of others to the standard, or the value created by non-standardized aspects of a product incorporating the standard.

Removal of the prohibitive order limitation would permit SEP owners to obtain injunctions on SEPs. That, in turn, would allow SEP owners to use the threat of injunction to obtain compensation beyond what is reasonable. This overvalues the contribution of SEP owners to standards-based products. An injunction on an SEP may be appropriate in extremely limited circumstances—specifically, when there is no mechanism by which a court can force an SEP user to pay for the SEP because of extraterritoriality or where an SEP user could not pay an adjudicated RAND rate due to lack of resources—but in general prohibitive orders are harmful to the proper functioning of the marketplace for SEPs and standardized products.

If IEEE standards become subject to prohibitive orders, this is likely to reduce the willingness of firms to participate in IEEE standards development projects and the desire of firms to implement IEEE standards into their products. This, in turn, harms users and the general development of technology.

Further, there is empirical evidence from the U.S. post-eBay experience that widespread availability of prohibitive orders hinders innovation. In one study, evidence based on differential exposure to patent litigation suggested that the reduction in litigation risk from the eBay case's limitation on injunctions when monetary compensation would be sufficient resulted in significant increases in innovative activity. The study concluded that firms that had a higher pre-eBay exposure were more innovative in comparison to the less-exposed firms after eBay, creating more patents, creating patents that were more likely to be cited by others, and shifting more money into R&D. This empirical evidence further buttresses the need to retain the IEEE Patent Policy's general disfavoring of prohibitive orders.

Comments regarding the ongoing use of the Custom LOA form under this option:

The Custom LOA form should remain available for SEPs that cover projects that were both initiated prior to the effective date of the 2015 Patent Policy and where the relevant aspect of the standard was adopted prior to that date. A patent owner should not be permitted to use the Custom LOA for an SEP that involves technology that was contributed to a standard after the effective date of the patent policy, even if the project itself was initiated prior to that date; to do otherwise would give long-term participants in a long-running project an advantage over new entrants and would likely disincentivize new innovators from participating in projects as a result.

Pros:

As these factors are optional and not exclusive, there is no benefit to removing the optional factors in the definition of Reasonable Rate.
Cons:

Removal of these factors would increase uncertainty in SEP licensing. A primary difficulty in valuing SEPs is the lack of information on how they are valued, due to the secrecy of licensing agreements, and of how they might be valued in a court context. The Patent Policy's optional factors provide useful guidance on how to value an SEP, which in turn reduces the uncertainty as to value and promotes licensing by ensuring both parties to a transaction are reasoning from a common set of assumptions.

If the factors were to be removed, then uncertainty increases. This, in turn, would make negotiation more difficult and eventually lead to reduced participation in IEEE standard-setting activities. It could also enable abuse by patent owners seeking to obtain rates higher than RAND as well as by product innovators seeking to obtain rates lower than RAND. The optional factors protect against both under and over valuation of SEPs, ensuring that patent owners receive compensation for their contributions while also ensuring that product makers do not have to pay more than a reasonable rate for SEPs.

Comments regarding the ongoing use of the Custom LOA form under this option:

The Custom LOA form should remain available for SEPs that cover projects that were both initiated prior to the effective date of the 2015 Patent Policy and where the relevant aspect of the standard was adopted prior to that date. A patent owner should not be permitted to use the Custom LOA for an SEP that involves technology that was contributed to a standard after the effective date of the patent policy, even if the project itself was initiated prior to that date; to do otherwise would give long-term participants in a long-running project an advantage over new entrants and would likely disincentivize new innovators from participating in projects as a result.

Pro: Option iii: Offer more options than before by: Allowing an LOA filer the ability to choose whether it may seek or not seek Prohibitive Orders in accordance with the current wording of the Patent Policy; and Clarifying the optionality of the factors included in the definition of Reasonable Rate.

Cons:

Allowing LOA filers to choose whether or not they want to seek Prohibitive Orders would open the patent policy to abuse by LOA filers. A provision making optional the bar on prohibitive is essentially equivalent to a removal of the provision, and thus would create all of the harms described with respect to option ii(a).

With respect to clarifying the optionality of the factors, CCIA believes that these factors are already clearly optional based on the text of the policy and the IEEE’s public statements regarding the policy. Modifications to the text are unnecessary and are likely to consume more of the IEEE’s resources for no actual benefit.
The Custom LOA form should remain available for SEPs that cover projects that were both initiated prior to the effective date of the 2015 Patent Policy and where the relevant aspect of the standard was adopted prior to that date. A patent owner should not be permitted to use the Custom LOA for an SEP that involves technology that was contributed to a standard after the effective date of the patent policy, even if the project itself was initiated prior to that date; to do otherwise would give long-term participants in a long-running project an advantage over new entrants and would likely disincentivize new innovators from participating in projects as a result.

Comments regarding the ongoing use of the Custom LOA form under this option:
Patent holdup occurs when a patent holder is able to obtain unreasonably high royalties by asserting its patent against another company’s products because that company’s most efficient way to develop, make, and sell those target products involves investments that cannot easily be redeployed to non-infringing products. The owner of a valid patent that is essential to making devices that comply with a popular telecommunications standard would wield enormous monopoly power if it could block device manufacturers from selling products that comply with that standard. The elevated royalty rates that would result from such unconstrained monopoly power would be passed through to device prices, causing substantial consumer harm. These problems would be magnified because there are thousands of Standard-Essential Patents (“SEPs”) reading on modern telecommunications standards, and each SEP owner could demand a monopoly price to permit use of the standard.

The problem of patent holdup is a special instance of the general problem of holdup that has been studied extensively in the literature on transaction cost economics. Opportunism by firms generally discourages investments that are subject to holdup. As a special case of that general principle, patent holdup retards innovation. With more than 300,000 utility patents issued each year by the U.S. Patent and Trademark Office (“PTO”), preventing patent holdup is critical to promoting economic growth, especially in industries experiencing rapid technological progress, where patent holdup can act as a headwind slowing down innovation.

Considerable progress to address the problem of patent holdup was made from 2006 to 2016. Some of that was legal change, but some of it was private action. The Institute of Electrical and Electronics Engineers (IEEE) in 2015 substantially clarified and strengthened the FRAND commitments it requires of participants, limiting the circumstances under which SEP holders could seek injunctions and clarifying the meaning of “reasonable rates,” with support from the Department of Justice in the form of a favorable business review letter. Industry participants can do more to prevent patent holdup. Notably, more Standards Setting Organizations (“SSOs”) can follow the lead of the IEEE by clarifying and strengthening their FRAND policies and creating mechanisms to enforce those policies. It would be unfortunate if the IEEE were to backtrack on a policy that properly serves as a model for others to
use because of misguided complaints about patent holdout.

Cons:

Comments regarding the ongoing use of the Custom LOA form under this option:

Option ii(a): Remove all of the Patent Policy provisions regarding Prohibitive Orders

Pros:
Patent advocates have sought to deflect concerns about patent holdup not only by denying its existence but by concocting a supposedly parallel story of “patent holdout.” On this theory, patent owners are being deprived of the fruits of their R&D investments by implementers who copy their technology but refuse to pay. The idea is to tell a story that parallels patent holdup.

Patent holdout is incoherent as a theoretical matter and rejected as an empirical matter. Empirically, between 95% and 99% of patent defendants in the IT industry are not in fact copying anything. They are independent inventors. Indeed, as we have seen, it is quite often impossible to know whether someone else invented the same thing you did at around the same time until years after the fact. Coupled with the notorious vagueness of IT patents and the sheer number of them, patent holdout does not explain what goes on in the technology industry unless it means failing to predict which of 500,000 patents, many of which you cannot see, will someday be asserted against technology you have developed yourself even though you have never heard of the inventor and they never built anything. That is not to say that there are never cases of deliberate copying, but they are a tiny fraction of patent suits in the IT industry.

The problems with patent holdout run far deeper than that, however. According to the patent holdout theory, the patent holder is unfairly disadvantaged because it has incurred the sunk costs of developing its invention before it can negotiate with an alleged infringer. But this is precisely how innovation in the private sector is intended to work in the presence of a patent system. The reward to an inventor is based on the incremental value of its invention, not on the amount of money expended to achieve that invention or the risk involved. A major invention can earn enormous profits even if it did not involve large R&D expenditures, and a patented invention may have no commercial value, even if it was very expensive to develop.

Those who express concerns about patent holdout seem to want to increase the returns to patent holders whose inventions add little or no incremental value. That’s simply not how the patent system works or is intended to work. Indeed, doing so would create perverse incentives for companies to seek patents with holdup power rather than to fund R&D programs leading to technological advances.

The patent holdout theory boils down to a complaint that basing patent damages on reasonable royalties is not favorable enough to patent holders; that they should be entitled to capture all the social value that traces in some way to their technology. But no property gives its owner the right to all related social surplus, and no market works that way. On top of all that, the patent holdout view seems rooted in the stilted view that all innovation comes in the form of patents. That proposition is disproven by a large literature and impressive body of evidence showing that a great deal of the creation, adoption, and diffusion of new technologies does not take place in the form of patents.

Those pushing the theory of patent holdout as parallel to patent holdup also misunderstand the actual operation of the patent system. Patent holdup, like any kind of holdup, occurs because the party engaging in patent holdup, namely the patent owner, has the law on its side and can therefore shut down the defendant’s conduct unless the defendant pays a surcharge. But there is no similar legal right of the party supposedly engaging in patent holdout to infringe a patent. To the contrary, the law gives patent owners the right to sue for an injunction (if they are practicing entities) and, in any event, for damages adequate to compensate for the infringement. While courts may have difficulty calculating those damages, they tend to err on the side of paying patent owners too much, not too little. Plus, a defendant deliberately infringing a patent must also pay punitive damages for willful infringement, and often attorneys’ fees as well. Some companies may try to “hold out” by infringing a patent and refusing to pay reasonable royalties, but the law can and does call them to account for it.
Patent holdout might be a worry if we did not have a patent system, but that system by design prevents patent holdout.

It is true that a group of companies might conspire together to drive down the price of inputs, just as they might form a cartel to raise their own prices. These “buyers’ cartels” are a legitimate worry of antitrust law. But a single company developing a product it made and defending itself in a later patent suit is not a buyers’ cartel. Nor is a group of companies that responds to the danger of patent holdup, not by refusing to pay or by setting an artificially low price, but by agreeing with the patent owners themselves to pay the price patent law would rightfully charge them anyway—a FRAND royalty.

Comments regarding the ongoing use of the Custom LOA form under this option:

Option ii(b): Remove all optional factors included in the definition of Reasonable Rate

Pros:

Cons:

Comments regarding the ongoing use of the Custom LOA form under this option:

Option iii: Offer more options than before by: Allowing an LOA filer the ability to choose whether it may seek or not seek Prohibitive Orders in accordance with the current wording of the Patent Policy; and Clarifying the optionality of the factors included in the definition of Reasonable Rate.

Pros:

Cons:

Comments regarding the ongoing use of the Custom LOA form under this option:
Option i: No change to the text of the 2015 Patent Policy

Pros:

None

Cons:

The views expressed in this response are my own personal views expressed based as an IEEE member and do not represent my employers, clients, or the organizations with which I am affiliated and may or may not align with the views of my employer.

Maintaining the IEEE 2015 Patent Policy is not in the best interest of the IEEE, as the policy has caused several patent holding entities who had previously filed positive LOAs (under pre-2015 Patent Policies) to either not file LOAs or to file negative LOAs. LOAs assure users of IEEE Standards that the holders of potential applicable patents will fairly license their patents at FRAND rates.

The IEEE 2015 Patent Policy attempts to provide guidance on how Prohibitive Orders should be used and how Reasonable Rates should be set. These topics and patent law in general are the domain of legislatures and judicial systems, not technical professional organizations. While the IEEE could and probably should provide its views on patent related issues, the IEEE should not be providing guidance in its patent policy. As stated on the IEEE SA LOA Records web page: “IEEE takes no position with respect to the reasonableness of rates, terms, and conditions of the license agreements offered by patent holders or patent applicants.” In my view the guidance provided on Prohibitive Orders and Reasonable Rates in the IEEE 2015 Patent Policy, is in direct conflict with this IEEE statement.

Many IEEE members are creative problem solvers who have generated patents in many fields of interest and in many countries. These members have different views on how patent holders should be compensated, ranging from: any idea I have can be used by anyone as they see fit without compensating me; to: this is my idea and anyone who uses it to make commercial gains should compensate me. The IEEE patent policy should support the views of its membership and be compatible with all fields of interest and in all countries, therefore the IEEE should only provide only minimal general guidance in its Patent Policy and should not attempt to provide specific guidance regarding complex issues (e.g., Prohibitive Orders and Reasonable Rates).
Comments regarding the ongoing use of the Custom LOA form under this option:

The use of the Custom LOA form basically allows LOAs to be submitted under the pre 2015 Patent Policy, allowing two Patent Policies to exist. For clarity, it would be best to have a single Patent Policy.

Option ii(a): Remove all of the Patent Policy provisions regarding Prohibitive Orders

Pros:

As stated on the IEEE SA LOA Records web page: "IEEE takes no position with respect to the reasonableness of rates, terms, and conditions of the license agreements offered by patent holders or patent applicants." Removal of provisions regarding Prohibitive Orders is a good step toward taking no position.

Cons:

None

Comments regarding the ongoing use of the Custom LOA form under this option:

none

Option ii(b): Remove all optional factors included in the definition of Reasonable Rate

Pros:

As stated on the IEEE SA LOA Records web page: "IEEE takes no position with respect to the reasonableness of rates, terms, and conditions of the license agreements offered by patent holders or patent applicants." Removal of all optional factors included in the definition of Reasonable Rate is a good step toward taking no position.

Cons:

None

Comments regarding the ongoing use of the Custom LOA form under this option:

None
Joseph Levy  
InterDigital, Inc.

**Option iii: Offer more options than before by:** Allowing an LOA filer the ability to choose whether it may seek or not seek Prohibitive Orders in accordance with the current wording of the Patent Policy; and Clarifying the optionality of the factors included in the definition of Reasonable Rate.

**Pros:**

This would further complicate the IEEE Patent policy and the LOAs filed. Keeping things simple so the Patent Policy applies to all fields of interest, locations, and Member needs is the preferred.

**Cons:**

none

**Comments regarding the ongoing use of the Custom LOA form under this option:**

none
**Option i: No change to the text of the 2015 Patent Policy**

**Pros:**

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<table>
<thead>
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<tr>
<td>a.</td>
<td>The patent policy ensures that a standard and essential patent holder provides a letter of assurance indicating that it will license its patents to anyone, either without compensation or at reasonable rates. Thus, the policy ensures that any patent holder is not able to demand royalties more than what is reasonable for the technology in question, thereby protecting the rights of licensees.</td>
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<tr>
<td>b.</td>
<td>The patent policy also provides that a standard and essential patent holder must not seek a prohibitive order, unless otherwise provided for in the policy. Such provision also safeguards the rights of licensees, as they are not under any threat of being in injunction for incorporating a standard technology in their devices. Such provisions increase the faith of device manufacturers and sellers, who are the implementers of the technology covered in standard essential patents, to freely incorporate such technology in their devices.</td>
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<td>c.</td>
<td>The patent policy also prohibits a licensor from engaging in coercive package licensing. The policy provides that a licensor must not condition the grant of a license on a potential licensee agreeing to take a license for non-Standard essential patents also owned by the licensor, or the potential licensee agreement to license its own patents to the licensor. Thus, the patent policy prohibits the licensor to coerce the licensee into accepting a license on terms that are independent of the technology being licensed.</td>
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<td>d.</td>
<td>What is important to note is that the patent policy also encourages the licensor and the licensee to engage in good faith negotiations for licensing of standard and essential patents. The policy also states that such negotiations should be without unreasonable delay, thereby ensuring that potential licensees do not engage in conduct of hold up and continue to infringe the rights of the licensors, being under no threat of an injunction has also ensured by the patent policy. Thus, the policy largely protects the interests of the licensors/standard and essential patent holders as well.</td>
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<td>e.</td>
<td>In furtherance to the above provision, the patent policy also provides that if an implementor/potential licensee does not participate in or comply with the orders of a national court in relation to licensing of standard and essential patents, the licensor has the right to seek prohibitive orders against such</td>
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unwilling licensee. Thus, once again, the patent policy ensures that the rights of the licensors are also protected, and the conduct of potential licensees also do not go unchecked.

f. Further, the policy also leaves open the option of arbitration between a potential licensee and licensor for licensing of standard and essential patent, including issues of validity, essentiality, reasonable rate, etc.

B. It is thus evident from the above discussion that the 2015 patent policy safeguards both the licensors and the licensees of standard essential patents. Accordingly, the submitter believes that no change in the 2015 patent policy should be made.

**Cons:**

| Since the Patent Policy provides a balanced approach towards the rights and interests of the patent owners and implementers, the submitter believes that there is no disadvantage in retaining the provisions of the Patent Policy in its current form. |

**Comments regarding the ongoing use of the Custom LOA form under this option:**

a. The custom LOA provided by the 2015 Patent Policy is a comprehensive letter of assurance that is required to be provided by a licensor/standard and essential patent owner. The submitter believes that the custom LOA should be continued. To improve clarity in negotiations, the optional portions of the LOA such as sample licenses, reasonable rates range or upper range values, patent/patent application number, etc., may be made mandatory.

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**Option ii(a): Remove all of the Patent Policy provisions regarding Prohibitive Orders**

**Pros:**

| The submitter strongly believes that there is no advantage of removing all provisions relating to prohibitive orders in the Patent Policy. |
Cons:

The submitter is of the opinion that removal of all provisions relating to prohibitive orders shall be extremely detrimental to the interests of potential licensees/technology implementers.

a. Firstly, removal of the provisions of prohibitive orders would mean that any licensor would be free to seek an injunctive relief against any potential licensee/technology implementer, thus, forcing them to take a license under the threat of closing down their businesses. If businesses are shut due to patent battles, the entire effort of developing technology standards shall go in vain as there will be no implementers to actually implement the standard technology.

b. Secondly, no restriction on any patent owner to seek prohibitive orders against a technology implementer would lead to many unfair patent disputes where every patent owner would try its luck to extract a license fee from the implementer under the threat of an injunction, irrespective of whether or not the patent owner’s technology is actually standard and essential. It is evident from the Patent Policy that IEEE does not validate the claims of essentiality owing to which patent owners have been known to make over declarations (declare more patents essential than what are actually essential). The removal of provisions of prohibitive orders would further fuel the over declaration issue by patent owners, which is already a rampant and enormous problem for the technology implementers.

c. Thirdly, removal of provisions relating to prohibitive orders would also be contrary to the position taken by national courts throughout the world that have confirmed that injunction must not be the norm but only an exception in standard and essential patent infringement cases. Some examples of such cases are Unwired Planet v. Huawei ([2020] UKSC 37 at the UK Supreme Court, [2017] EWHC 711 Pat at the UK High Court), Sisvel v Haier (FCJ docket no. KZR 36/17 at the German Federal Court of Justice (FCJ)), Microsoft Corp. v. Motorola Inc. (696 F.3d. 872 (9th Cir. 2012) at the United States Court Of Appeals For The Ninth Circuit), Huawei v. Conversant (Case numbers (2019) Zui Gao Fa Zhi Min Zhong No.732, (2019) Zui Gao Fa Zhi Min Zhong No.733 and (2019) Zui Gao Fa Zhi Min Zhong No.734 at the Chinese Supreme Court), Optis Cellular Technology LLC vs Apple Retail UK Limited ([2019] EWHC 3538 (Pat) at the UK High Court), Philips v. OnePlus (CS(Comm) No. 574 of 2019 at the Delhi High Court), Nokia v. Lenovo (CS (comm) no. 581/2019 at the Delhi High Court), IDC v. Xiaomi (CS (comm) no. 295/2020 at the Delhi High Court), Philips v. Vivo (CS (comm) no. 383/2020 at the Delhi High Court) and many others.

Comments regarding the ongoing use of the Custom LOA form under this option:

In case the provisions relating to prohibitive orders are removed, the LOA form would become completely redundant. The submitter has observed that licensors typically only provide information that is mandatorily asked for in the LOA and any information that is optional in the LOA is usually not provided by the licensors. Since most of the other important information such as patent numbers, claim numbers, royalty rates, sample licenses, etc. are optional, the one important use of the custom LOA is the assurance that the licensor shall not seek prohibitive orders against technology implementers. If this provision is also removed, the custom LOA would become completely useless.
Option ii(b): Remove all optional factors included in the definition of Reasonable Rate

**Pros:**

The submitter believes that there is no advantage of removing optional factors in the definition of reasonable rates.

**Cons:**

The submitter is of the opinion that removing the optional factors from the definition of reasonable rate shall be extremely disadvantageous. Doing so, would not increase but in fact decrease the clarity in relation to reasonable rates that the 2015 patent policy aims to bring in. Since the considerations mentioned in the definition of reasonable rate are not exclusive, they are not detrimental to the interests of the licensors as well. More specifically, if the provision relating to royalty rate being dependent on the value of the technology provided to the smallest saleable compliant implementation removed from the patent policy, it would enable the licensors to assert royalties based on the value of the technology to an end product rather than the smallest saleable compliant implementation. This would empower the patent owners/licensors to seek royalties more than the actual contribution of their standardized technology. Thus, it is clear that such a change would unfairly increase the royalty rates demanded by the licensors and ultimately force technology implementers to not implement certain technology standards that are not extremely crucial to the working of their products. Further, by allowing the removal of optional factors from the definition of royalty rate would also enable patent owners/licensors to include those licenses as a benchmark for demanding royalty rates from a potential licensee, that have been obtained under the threat of an injunction. The submitter believes that such licenses do not represent the true and actual value of the technology that has been developed by a patent owner and standardized by the IEEE. Allowing the use of such licenses in determining reasonable rate would be unfair for potential licensees/technology implementers.

Comments regarding the ongoing use of the Custom LOA form under this option:

a. The custom LOA provides an assurance from the patent owner to the technology implementor that it shall license its patents on reasonable rates. If the definition of reasonable rates is altered, the submitter believes that the assurance provided by the custom LOA will not be an assurance in the true sense because it would allow patent owners to declare that they will license patents on reasonable rates but because of the changes in the definition, the rates offered would not actually be reasonable for the reasons provided above.

Option iii: Offer more options than before by: Allowing an LOA filer the ability to choose whether it may seek or not seek Prohibitive Orders in accordance with the current wording of the Patent Policy; and Clarifying the optionality of the factors included in the definition of Reasonable Rate.

**Pros:**

The submitter believes that there is no advantage for allowing a LOA filer to choose whether or not to seek prohibitive orders or clarify the optionality of the factors included in the definition of reasonable rates.
Cons:

The submitter believes that there is no advantage for allowing a LOA filer to choose whether or not to seek prohibitive orders or clarify the optionality of the factors included in the definition of reasonable rates.

Comments regarding the ongoing use of the Custom LOA form under this option:

a. As submitted herein, the submitter believes that allowing the LOA filer the ability to choose to seek or not seek prohibitive orders is as good as allowing the patent owner to seek prohibitive orders. The custom LOA form would thus also have to be modified accordingly, which will make the licensing process more unfair than fair.

b. The optional factors in the LOA are already clear. The submitted is of the opinion that the optional factors in the LOA should be made mandatory.
Option i: No change to the text of the 2015 Patent Policy

Pros:

Tesla, Inc., as a leading automaker developing compelling electric vehicles and energy products for our customers to enable our mission of transitioning the world to sustainable energy, supports the IEEE Patent Policy, and believes it supports a positive ecosystem for development, use and widespread promulgation of IEEE standards. The Patent Policy carefully balances stakeholder interests and ensures that patent holders and users of IEEE standards, as well as consumers, are well protected. The Patent Policy has helped reduce disputes around IEEE standards, unlike as are experienced with other SSO’s standards.

Cons:

Maintaining the IEEE Patent Policy does not have any meaningful downsides.

Comments regarding the ongoing use of the Custom LOA form under this option:

The Custom LOA should remain an option only for projects started prior to the approval of the Patent Policy.

Option ii(a): Remove all of the Patent Policy provisions regarding Prohibitive Orders

Pros:

Changing the IEEE Patent Policy would not have any meaningful benefits.

Cons:

The Patent Policy correctly limits the use of SEP injunctions, while preserving the SEP owner’s ability to obtain RAND licensing terms. This clarity both protects SEP owner interests, while also supporting investment in and use of IEEE standards. Removing the text addressing Prohibitive Orders would increase disputes, and put users of IEEE standards at risk of abuses.

Comments regarding the ongoing use of the Custom LOA form under this option:

The Custom LOA should remain an option only for projects started prior to the approval of the Patent Policy.
Option ii(b): Remove all optional factors included in the definition of Reasonable Rate

Pros:

| Changing the IEEE Patent Policy would not have any meaningful benefits. |

Cons:

| The Patent Policy correctly addresses Reasonable Rates and provides useful guidance to licensing parties, reducing disputes while maintaining a fair approach for all parties. Removing this text would increase disputes and risk leading to unfair licensing demands. |

Comments regarding the ongoing use of the Custom LOA form under this option:

| The Custom LOA should remain an option only for projects started prior to the approval of the Patent Policy. |

Option iii: Offer more options than before by: Allowing an LOA filer the ability to choose whether it may seek or not seek Prohibitive Orders in accordance with the current wording of the Patent Policy; and Clarifying the optionality of the factors included in the definition of Reasonable Rate.

Pros:

| There would be no benefits to changing the current IEEE Patent Policy. |

Cons:

| The Patent Policy correctly limits the use of SEP injunctions, while preserving the SEP owner’s ability to obtain RAND licensing terms. This clarity both protects SEP owner interests, while also supporting investment in and use of IEEE standards. Removing the text addressing Prohibitive Orders would increase disputes, and put users of IEEE standards at risk of abuses. Making these limitations optional at the SEP owner’s election would not support IEEE or stakeholder interests. Tesla likewise sees no need to clarify that the factors listed as optional in the Patent Policy are, in fact, optional. |

Comments regarding the ongoing use of the Custom LOA form under this option:

| The Custom LOA should remain an option only for projects started prior to the approval of the Patent Policy. |
Option i: No change to the text of the 2015 Patent Policy

Pros:
There are no pros. The change made in 2015 was made to increase the influence of a subset of companies and change the neutral, non-commercial role of the IEEE-SA into one that is biased and which compromises the reputation and international standing of the IEEE-SA.

Cons:
Licensing under the pre-2015 policy took place in accordance with the free negotiation between parties involved with the FRAND commitment preventing patent blocking as a threat to the use of the Standard. The change in 2015 has resulted in an overwhelming number of negative LOAs being submitted by participants, more confusion and uncertainty with regard to patent policy and hence this long overdue reevaluation of IP policy. The DOJ's 2020 letter to the IEEE states that 77% of LOAs submitted on IEEE 802.11 standards between 2016 and 2019 were negative LOAs. One important note is that the ISO/IEC JTC the fast track process of e.g. IEEE 802.11ax has come to a halt because due to the negative LOAs for such standards.

Comments regarding the ongoing use of the Custom LOA form under this option:
The use of the 2019 custom LOA provides some options that were eliminated by the 2015 change but there is no need to have multiple LOA forms. Returning to the pre-2015 form is the most honest way to return the IEEE-SA to its traditional role.

Option ii(a): Remove all of the Patent Policy provisions regarding Prohibitive Orders

Pros:
Agree. There was never a good reason for the IEEE to interfere with the existing FRAND commitments and options provided under the law with regard to patent licensing. Licensing under the pre-2015 policy took place in accordance with the free negotiation between parties involved with the FRAND commitment preventing patent blocking as a threat to the use of the Standard. The change in 2015 has resulted in an overwhelming number of negative LOAs being submitted by participants, more confusion and uncertainty with regard to patent policy and hence this long overdue reevaluation of IP policy.

Cons:
none
The use of the 2019 custom LOA provides some options that were eliminated by the 2015 change but there is no need to have multiple LOA forms. Returning to the pre-2015 form is the most honest way to return the IEEE-SA to its traditional role.

**Option ii(b): Remove all optional factors included in the definition of Reasonable Rate**

**Pros:**

The definition of a "reasonable rate" should not be restricted in any way by the IEEE-SA. International courts are still coming to grips with the complicated question of how to determine what a "reasonable rate" is in the context of a FRAND commitment and no clear set of rules have yet to be unanimously adopted in determining the basis for its calculation. The IEEE-SA should not act to usurp the role of the courts in mandating (the choice is not optional) the basis for royalty calculation. "Reasonable" should be determined by the economic realities of the marketplace and the value of the technical contribution to the final product. Courts have already ruled that the value of an SEP should discount the fact that it is part of a Standard therefore the IEEE-SA has no role to play.

**Cons:**

There are no cons. If the statement on reasonable rate was truly optional, there would be no reason to remove it.

**Comments regarding the ongoing use of the Custom LOA form under this option:**

The use of the 2019 custom LOA provides some options that were eliminated by the 2015 change but there is no need to have multiple LOA forms. Returning to the pre-2015 form is the most honest way to return the IEEE-SA to its traditional role.

**Option iii: Offer more options than before by:** Allowing an LOA filer the ability to choose whether it may seek or not seek Prohibitive Orders in accordance with the current wording of the Patent Policy; and Clarifying the optionality of the factors included in the definition of Reasonable Rate.

**Pros:**

Conditional statements regarding commitments added to the Patent Policy (pre-2015) should be made truly optional and other conditions should be added as options for example, conditioning the license on FRAND terms to other SEP patent holders only if they make the same commitment to the Patent Policy.

**Cons:**

None
Comments regarding the ongoing use of the Custom LOA form under this option:

The use of the 2019 custom LOA provides some options that were eliminated by the 2015 change but there is no need to have multiple LOA forms. Returning to the pre-2015 form is the most honest way to return the IEEE-SA to its traditional role.
Option i: No change to the text of the 2015 Patent Policy

Pros:

The IEEE Patent Policy helps to support the success of IEEE’s standards. It provides clarity in the marketplace, reduces disputes, and preserves and protects the benefits of competition. It fairly balances the interests of SEP holders and users of IEEE standards. IEEE’s standard setting activities have thrived under the current policy, which has been in effect for many years.

Cons:

There are no cons to maintaining the IEEE Patent Policy.

Comments regarding the ongoing use of the Custom LOA form under this option:

For standards projects initiated prior to the effective date of the Patent Policy, the custom LOA form should be permitted so that parties may make a declaration pursuant to the text of the IEEE policies that were in effect at the time the project was initiated. But for projects initiated after adoption of the Patent Policy, the custom LOA form should not be permitted.

Option ii(a): Remove all of the Patent Policy provisions regarding Prohibitive Orders

Pros:

There are no benefits to removing the Patent Policy’s express limitations on prohibitive orders.

Cons:

The use of injunctions or similar prohibitive orders against IEEE standards would be bad and significant risk for IEEE, for IEEE participants, and for consumers. Unless the SEP holder is unable to obtain RAND compensation via other means, such as court adjudication, and SEP implementer is unwilling licensee, SEP prohibitive orders should not be available, because it would interfere with the use and promulgation of IEEE standards. The IEEE Patent Policy correctly balances the interest of SEP holders that seek reasonable compensation with the interests of users of IEEE standards to not be subject to abusive demands and tactics. If IEEE standards become subject to prohibitive orders, companies may choose to avoid IEEE standards in favor of other alternative technologies.
Comments regarding the ongoing use of the Custom LOA form under this option:

For standards projects initiated prior to the effective date of the Patent Policy, the custom LOA form should be permitted so that parties may make a declaration pursuant to the text of the IEEE policies that were in effect at the time the project was initiated. But for projects initiated after adoption of the Patent Policy, the custom LOA form should not be permitted.

Option ii(b): Remove all optional factors included in the definition of Reasonable Rate

Pros:
There would be no benefit to removing the optional factors in the definition of Reasonable Rate.

Cons:
Increasing uncertainty around SEP licensing terms would inhibit negotiations, increase disputes, create the potential for abuse, and undermine adoption of IEEE standards. The Patent Policy properly balances the interest of SEP owners that seek reasonable compensation with the interests of users of IEEE standards to not be subject to abusive demands.

Comments regarding the ongoing use of the Custom LOA form under this option:

For standards projects initiated prior to the effective date of the Patent Policy, the custom LOA form should be permitted so that parties may make a declaration pursuant to the text of the IEEE policies that were in effect at the time the project was initiated. But for projects initiated after adoption of the Patent Policy, the custom LOA form should not be permitted.

Option iii: Offer more options than before by: Allowing an LOA filer the ability to choose whether it may seek or not seek Prohibitive Orders in accordance with the current wording of the Patent Policy; and Clarifying the optionality of the factors included in the definition of Reasonable Rate.

Pros:
There would be no benefits to these approaches.
Cons:

As to Prohibitive Orders, IEEE should not create approaches supporting injunctive relief against IEEE standards. The IEEE Patent Policy already provides for the use of prohibitive orders where compensation is not available via less drastic means (e.g., via royalty adjudication). The IEEE Patent Policy correctly balances the interest of SEP holders that seek reasonable compensation with the interests of users of IEEE standards to not be subject to abusive demands and tactics. Option 3(i) would cause confusion and negatively impact IEEE standards.

As to the optionality of the factors, the optionality of the factors in the Patent Policy already is well addressed in the policy, and also in the IEEE’s FAQs. Further efforts to modify the text are thus unnecessary and may cause confusion.

Comments regarding the ongoing use of the Custom LOA form under this option:

For standards projects initiated prior to the effective date of the Patent Policy, the custom LOA form should be permitted so that parties may make a declaration pursuant to the text of the IEEE policies that were in effect at the time the project was initiated. But for projects initiated after adoption of the Patent Policy, the custom LOA form should not be permitted.
The IEEE Patent Policy is fundamentally fair to all stakeholders, and provides important clarity and security to encourage adoption of IEEE standards. IEEE’s standard setting activities have thrived under the current policy, which has been in effect for many years. The signatories hereto research, develop and sell products throughout the international automotive markets, including products that implement IEEE standards. Our companies support and rely upon the key balance set forth in the Patent Policy, which enables SEP owners to fairly seek royalties for the patents, while also protecting users of IEEE standards from abusive licensing practices. We believe that the IEEE’s Patent Policy – unlike the less clear policies used at some SSOs – has limited disputes around IEEE standards and facilitated investment in and use of IEEE standards.

Pros:

Changing the IEEE Patent Policy would have no benefits.

Cons:

Comments regarding the ongoing use of the Custom LOA form under this option:

The signatories hereto support use of the Custom LOA form for PARs initiated prior to the effective date of the Patent Policy. The signatories hereto do not support use of the custom LOA form for PARs initiated after adoption of the Patent Policy.

Option ii(a): Remove all of the Patent Policy provisions regarding Prohibitive Orders

Pros:

Changing the IEEE Patent Policy would have no benefits.
The use of SEP injunctions is abusive where the patent owner has the ability to obtain RAND compensation without them. Unfortunately, some of the signatories hereto have first-hand experience with patent owners that seek to use SEP injunctions to force the acceptance of non-RAND rates and terms – and we have seen that abusive tactic work in practice despite the non-RAND nature of the royalty demand. The IEEE Patent Policy currently balances the interest of SEP holders that seek reasonable compensation with the interests of users of IEEE standards to not be subject to abusive demands and tactics. The IEEE was right to provide limitations on the use of Prohibitive Orders, and also to strike a fair balance in how that right is constrained. The current text provides clarity to the market and encourages investment in, development of, and adoption of IEEE standards and standardized products.

Cons:

Option ii(b): Remove all optional factors included in the definition of Reasonable Rate

Pros:

Changing the IEEE Patent Policy in this manner would have no benefits.

Cons:

Removing the optional factors from the definition of Reasonable Rate would undermine clarity in the market, reduce incentives to invest in IEEE standards, and harm users of IEEE standards that may be faced with abusive royalty demands unconnected to the value of the patented technology. The Patent Policy currently balances the interest of SEP owners that seek reasonable compensation with the interests of users of IEEE standards to not be subject to abusive demands. This makes it easy for implementers to introduce new standardized technologies with low business risk. IEEE has documented a fair approach to Reasonable Rates and appropriate considerations in assessing such rates, and should not now backtrack at the risk of reducing clarity and promoting abuses. Removing the optional factors will only create ambiguity, and will ultimately increase licensing disputes and licensing litigation as it is the case under patent policies of other SSOs that provide only little and very vague guidance on the calculation of FRAND rates and terms.

Comments regarding the ongoing use of the Custom LOA form under this option:

The signatories hereto support use of the Custom LOA form for PARs initiated prior to the effective date of the Patent Policy. The signatories hereto do not support use of the custom LOA form for PARs initiated after adoption of the Patent Policy.
Pros:
Changing the IEEE Patent Policy in either of these manners would have no benefits.

Cons:
An approach whereby some IEEE stakeholders are subject to different rules than others is problematic and should be avoided. Option 3(i) may cause confusion and thus negatively impact the use of IEEE standards. The IEEE Patent Policy already provides for the use of prohibitive orders where compensation is not available via less drastic means (e.g., via royalty adjudication). Limitations on the seeking of Prohibitive Orders should not be optional as such limitations are of benefit to all stakeholders, and already properly respect patent holders’ legitimate interests. As previously noted, the text around Prohibitive Orders supports IEEE and its standards, and restricts abuses that harm IEEE stakeholders.

The signatories hereto see no benefit to further clarification regarding the optionality of the factors in the definition of Reasonable Rate, as the text already is entirely clear on this point.

Comments regarding the ongoing use of the Custom LOA form under this option:
For standards projects initiated prior to the effective date of the Patent Policy, the custom LOA form should be permitted so that parties may make a declaration pursuant to the text of the IEEE policies that were in effect at the time the project was initiated. But for projects initiated after adoption of the Patent Policy, the custom LOA form should not be permitted. Custom LOA’s will add complexity and an unnecessary difficulty.
Option i: No change to the text of the 2015 Patent Policy

Pros:


There are no benefits. The 2015 Policy sets in stone an inherent imbalance and bias which is unjustified at law, commercial practice, or by economic theory. The IEEE has affirmed in the past that the basis of the 2015 Policy is an assumption of patent hold up. This assumption has proven irrational and baseless, promotes non-RAND conduct, and has negatively impacted the strategic objectives and reputation of IEEE, as well as the sustainability of innovation ecosystems.
Cons:

Based on the IEEE Board of Governors (BOG) direction to initiate a review of the IEEE Policy, Fraunhofer encourages IEEE to consider possible updates or modifications to the 2015 Policy. Fraunhofer supports returning to the 2007 Patent Policy, which was compliant with the WTO TBT Agreement and US law and consistent with the neutral approach of international standards bodies.

1. The 2015 Policy does not adhere to the World Trade Organization Principles for International Standardization

i. Fraunhofer appreciates IEEE’s acknowledgement in the August 19, 2020 position statement (http://globalpolicy.ieee.org/wp-content/uploads/2020/08/IEEE20013.pdf) of the importance of the WTO TBT Agreement principles and WTO TBT Committee Decision on Principles for the Development of International Standards (WTO TBT Committee Decision). The statement indicates that IEEE ensures that ‘all members and other stakeholders have meaningful opportunities to participate in the IEEE standards development process as well as in the governance of that process’.

ii. On August 8, 2021, IEEE submitted feedback (https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/13099-Standardisation-strategy/F2665663_en) in response to the European Commission’s New Standardization Strategy initiative and stated that IEEE is a ‘renowned, globally recognized standards developments organization (SDO), grounded in an open, inclusive, transparent, and consensus-building process’. IEEE also suggested the European Commission should cooperate with, participate and provide leadership in SDOs in the international standardization system addressing European needs and complying with the WTO TBT principles.

iii. The TBT Agreement is reflected in US law. SDOs that adhere to principles of openness, consensus, balance, and due process can benefit from the protections of the Standards Development Organization Advancement Act of 2004 (SDOAA). The SDOAA provides that potential SDO liability under US antitrust law is to be assessed under the rule of reason and cannot result in treble damages, provided that the SDO complies with the governance requirements in the Office of Management and Budget Circular Number A-119 (OMB Circular A-119). For SDO standards to be referenced in federal law, the SDO must operate in a manner consistent with the definition of standards development organization contained in the SDOAA as ‘a domestic or international organization that plans, develops, establishes, or coordinates voluntary consensus standards using procedures that incorporate the attributes of openness, balance of interests, due process, an appeals process in a manner consistent with the Office of Management and Budget Circular Number A-119’.

iv. In view of the above, Fraunhofer encourages IEEE to adhere to the WTO TBT principles and US law for international standards development during the ongoing Patent Policy review process. This in itself is considered an important catalyst for IEEE and the 2015 Policy to change.

2. The procedural aspect of the 2015 IEEE Patent Policy

i. Fraunhofer has previously indicated its reservations regarding the 2015 Patent Policy revision process. The changes incorporated into the 2015 Policy were drafted by a closed subcommittee appointed by the Ad Hoc Group tasked with considering possible revisions to the previous 2007 Policy. These concerns have also been shared by other stakeholders (https://ir.lawnet.fordham.edu/plj/vol27/iss2/1; https://journals.sagepub.com/doi/full/10.1177/0003603X19844630; https://www.4ipcouncil.com/download_file/236/1227);
The resulting 2015 Policy disadvantages technology contributors instead of providing a balanced and neutral framework for all involved in the IEEE standards ecosystem. This is evident by the restrictions placed on patent holders which (a) effectively prevent seeking injunctive relief (Prohibitive Orders), and (b) the creation of an ingrained imbalance for parties participating in commercial negotiations for RAND licenses.

The procedural concerns regarding the 2015 Patent Policy revision process were addressed in the 2014 decision of the IEEE SA Board of Governors (BOG) which stated: ‘The rules pertaining to governance (as opposed to technical standards development activities) do not, and cannot, require openness, consensus-building, or the inclusion of individuals who do not have fiduciary duties to the IEEE in the decision-making process of IEEE-SA governance committees’ [IEEE SASB Board of Governors Appeal Officers Decision of 22 October 2014].

The 2015 Policy revision process and the 2014 IEEE BOG appeal decision appear to be inconsistent with IEEE’s external communications and the good governance principles expressly recognized in the WTO TBT, WTO TBT Committee Decision, SDOAA and OMB Circular A-119. To ensure that IEEE sets a positive global example and aligns with the international framework for SDOs - as was the case prior 2015 - Fraunhofer encourages IEEE to adhere to these principles during this review process and decisions taken on the 2015 Policy. The status quo is not considered an option.

The substantive aspect of the 2015 IEEE Patent Policy

The 2015 Policy is not aligned with US law. The calculation methods for patent infringement damages by US Courts in jury trials do not impose a substantive obligation for private parties to structure bilateral license arrangements in any specific way (e.g., by calculating royalty rates based on the smallest salable patent-practicing unit (SSPPU). This has been expressly affirmed by Federal Courts, such as in CSIRO v. Cisco [809 F.3d 1295, 1303 (Fed. Cir. 2015]): ‘The rule Cisco advances - which would require all damages models to begin with the smallest salable patent-practicing unit - is untenable. It conflicts with our prior approvals of a methodology that values the asserted patent based on comparable licenses. See VirnetX, 767 F.3d at 1331; ActiveVideo Networks, Inc. v. Verizon Commc’ns, Inc., 694 F.3d 1312, 1333 (Fed. Cir. 2012); Finjan, Inc. v. Secure Computing Corp., 626 F.3d 1197, 1211–12 (Fed. Cir. 2010).’

In the 2014 Federal Circuit Court decision in Ericsson v. D-Link [773 F.3d 1295 (Fed. Cir. 2014)], the Court confirmed a license offer cannot be considered non-FRAND solely because it was calculated on the basis of the end-product price and not the SSPPU. This counters the Federal Circuit precedent on the value of comparable licenses – which, as a general rule, are not calculated based on SSPPU - when calculating a reasonable royalty for patent damages [see, CSIRO v. Cisco, 809 F.3d 1295 (Fed. Cir. 2015); Laser Dynamics, Inc. v. Quanta Comp., Inc., 694 F.3d 51 (Fed. Cir. 2012)].

Since 2015, US Courts have affirmed that the SSPPU, which in the 2015 Patent Policy is referred to as “smallest salable compliant implementation,” is only an evidentiary principle that assists juries calculating damages in patent infringement trials applying the statutory principle of apportionment [see also, Garretson v. Clark, 111 U.S. 120 (1884); Virnetx, Inc. v. Cisco Sys., Inc., 767 F.3d 1308, 1327 (Fed. Cir. 2014)]. In the FTC v. Qualcomm decision [Case No. 19-16122 (9th Cir. 2020)], the 9th Circuit explicitly rejected SSPPU as a substantive obligation under US antitrust law for essential patent owners to calculate FRAND rates. In HTC v. Ericsson [Case No. 19-40566 (5th Cir. 2021)], the 5th Circuit held that a license offer based on the end-product price, and not the SSPPU, does not violate the patent owner’s contractual FRAND obligations.
iv. The 2015 Policy rule on Prohibitory Orders (injunctions) also appears inconsistent with Federal Circuit precedent in Apple v. Motorola [757 F.3d 1286 (Fed. Cir. 2014)] which rejected a categorical rule against injunctions for essential patents and decided that injunctive relief for essential and non-essential patents is available under the four equitable factors determined in the Supreme Court’s eBay decision [547 U.S. 388 (2006)]. The impact of the rule on Prohibitory Orders is to insert an equivalent to a non-tariff barrier to trade.

v. In addition to the above, we note that the 2015 Policy provisions on injunctive relief, reasonable rates and the imposition of Compliant Implementation as defined in the 2015 Policy interfere with bilateral commercial negotiations between licensors and implementers of IEEE standards. This is contrary to the technical and non-commercial nature of IEEE as a technical standards body. The determination of what contractual terms are RAND in each instance is left to particular negotiating parties who for their own circumstances decide on what amounts to a RAND license. These provisions themselves are not consistent with RAND or accepted commercial practices for international licensing.

4. Negative impacts resulting from the 2015 IEEE Patent Policy

i. Following the 2015 Policy coming into effect, there was a significant increase in the number of negative LOAs or LOAs using the custom form submitted to IEEE due to the substantially reduced incentives for patent holders to contribute to IEEE-SA standards. It is not clear whether the number of Negative LOAs filed is accurately reflected in the publicly reported IEEE accepted LOA records.

ii. The number of positive LOAs has similarly been impacted with a 90% decrease in 802.11 positive LOAs and seven negative LOAs, a historic high (excluding siblings and duplicates), filed in 2016 after the 2015 Policy came into effect (see Figure 7: https://journals.sagepub.com/doi/full/10.1177/0003603X19844630. Of note, only one negative 802.11 LOA was filed between the period from 2005 to 2015. This upward trend for negative or custom LOAs has continued. During the March 21, 2021 IEEE PatCom meeting, it was reported that 93% of the accepted LOAs during the previous quarter used the pre-2015 Policy custom LOA form.

iii. The increase in negative declarations is particularly evident for IEEE Standard 802.11 and has been widely recognized as causing delay in the development, adoption, and commercialization of IEEE standards. Based on the IEEE PatCom LOA records, it has been reported that from January 2016 until June 2019, 77% of the total IEEE accepted 802.11 LOAs were negative (https://www.scribd.com/document/421506720/WiFi-LoAs-Submitted-1-1-2016-to-6-30-2019).

iv. The increase in filing of negative and custom LOAs is unprecedented in IEEE history. As a result, IEEE’s credibility and relationships with other SDOs appear to have been directly impacted, with international standards bodies refusing or withdrawing accreditation of IEEE standards. This has also created uncertainty for IEEE standards in the market for both patent holders and implementers.

4a. ANSI American National Standards

i. The presence of negative LOAs submitted for IEEE standards 802.11ah and 802.11ai resulted in ANSI declining to approve the standards as ANSI approved American National Standards (ANSs) (Page 15, ANSI Standards Action 1 March 2019: https://share.ansi.org/Shared%20Documents/Standards%20Action/2019-PDFs/SAV5009.pdf; Mlex article ´Electrical engineer institute’s new WiFi measures won’t get American national standard designation”: https://mlexmarketinsight.com/news-hub/editors-picks/area-of-expertise/antitrust/electrical-engineer-
ii. Currently, none of the IEEE 802.11 standards are recognized as ANSI ANSs:
https://share.ansi.org/Shared%20Documents/Standards%20Activities/American%20National%20Standards/Approved%20and%20Proposed%20ANS%20Lists/Approved%20ANS.pdf. Several 802.11 ANSs were recently withdrawn due to not having been revised or reaffirmed within ten years from the date of approval, with the remaining approved ANSs being withdrawn by IEEE:

4b. ISO/IEC JTC1/SC6 – Process for the ISO adoption of IEEE 802 standards

i. Ballot for 802.11ax

IEEE standard 802.11ax is currently being considered within ISO/IEC JTC 1 SC 6 for ISO/IEC adoption under the ISO/IEEE PSDO Agreement (https://ieee-sa.imeetcentral.com/802psdo/). During the 60-day pre-ballot, the national bodies of Sweden, Finland, Germany and Japan submitted comments indicating concerns regarding four negative LOAs submitted to IEEE (https://standards.ieee.org/content/dam/ieee-standards/standards/web/governance/patcom/xls-files/ieee-802.11-amendments.xlsx) and asserted the adoption process cannot proceed until positive LOAs are submitted (https://www.ieee802.org/11/Liaisons/Liaisons-and-External-Communications.html; https://mentor.ieee.org/802.11/dcn/21/11-21-1400-03-0jtc-response-to-comments-on-802-11ax-in-60-day-ballot.docx). It is understood the concerns regarding the negative LOAs have delayed the ISO adoption process for 802.11ax.

ii. Ballot for 802.11ay

IEEE standard 802.11ay was considered within ISO/IEC JTC 1 SC 6 for ISO/IEC adoption under the ISO/IEEE PSDO Agreement (https://ieee-sa.imeetcentral.com/802psdo/). There are four negative LOAs which have been submitted to IEEE for the 802.11ay standard (https://standards.ieee.org/content/dam/ieee-standards/standards/web/governance/patcom/xls-files/ieee-802.11-amendments.xlsx). On October 9, 2021, IEEE 802.11ay did not receive the required approval from ISO/IEC JTC 1 SC 6 for submission as a Final Draft International Standard (FDIS). The national bodies of Belgium, Canada, China, Finland, Netherlands and Sweden submitted comments raising concerns regarding the four negative LOAs and asserted the process for approving IEEE 802.11ay for ISO should not proceed until positive LOAs are received (https://mentor.ieee.org/802.11/dcn/21/11-21-1593-00-0jtc-agenda-for-nov-2021-virtually.pptx). The concerns regarding negative LOAs, which derive as a direct result of the 2015 Policy adoption, are currently preventing the ISO adoption process for 802.11ay.

5. IEEE’s development of open source

i. During the 23-24 September IEEE SASB meeting, the IEEE SA President’s Report (https://app.box.com/s/r2hy5mqk5dj7zcdqdoaxd4q4w1hu6v) stated initiative priority 3 of the IEEE SA Strategy is ‘Growing and sustaining our consensus platforms, such as market-oriented practices, to support collaborative efforts in forming consortia and promoting IEEE open source’.

ii. IEEE has also stated it is taking the practical approach towards open source development. This appears to be at the expense of IEEE members that hold patents, as IEEE requires any contributor or commenter to provide a royalty free patent grant through the Apache 2.0 Contributor Licensing Agreement (CLA) on open source software incorporated into IEEE standard. This has practically
eliminated the option for a contributor to receive RAND royalties on any potentially essential claims for open source software that is incorporated into IEEE standards.

iii. Given IEEE’s intention is to continue promoting open source under CLAs which preclude RAND compensation, Fraunhofer queries how does the IEEE Patent Policy fit with the open source CLAs. It is doubtful whether the open source CLAs currently used in IEEE satisfy good governance principles of openness, balance and consensus which are enshrined in the WTO TBT framework, the OMB Circular A-119 and the SDOAA. The mandating of royalty free patent grants for contributors or commenters effectively excludes stakeholders who rely on RAND compensation to participate in IEEE standards development.

iv. Fraunhofer has previously suggested two open source licenses which appear to be compatible with the basic principle of IEEE standards development activities (being RAND) and the basic requirements applying to standards bodies (be these national or international):

a. BSD 3-Clause Clear License (https://spdx.org/licenses/BSD-3-Clause-Clear.html). The BSD 3 Clause Clear license expressly states that no patent license is included with any copyright license and is, therefore, wholly consistent with a RAND IPR policy; and

b. Open Air Interface (OAI) Public License v 1.1 (https://www.openairinterface.org/?page_id=698). The Open Air Interface Public License v 1.1 provides a patent license for study and research purposes only, and explicitly states that a patent license for other purposes needs to be negotiated under FRAND terms.

v. While IEEE has stated that it is neutral and makes no comment in relation to the selected licenses, the currently selected licenses have clear implications of either (i) contaminating patent rights (for example, Apache 2.0 by asserting coverage of both copyrighted material and patents); or (ii) creating uncertainty as regards the operating environment (BSD 3 Clause, in the sense that it is is moot whether or not this license seeks to apply to both copyright and patents). Either situation is not considered optimal for the promotion, contribution to or uptake of IEEE standards.

vi. Should the open source initiative continue to be pursued in the present form, it could be that the IEEE Patent Policy (in whatever form) becomes redundant.

Comments regarding the ongoing use of the Custom LOA form under this option:

If no changes are made to the text of the 2015 Policy, it can reasonably be anticipated that custom LOAs (and negative LOAs) will continue to be used so as not to trigger the bias licensing negotiation framework embodied in a positive LOA associated with the 2015 Policy.
Option ii(a): Remove all of the Patent Policy provisions regarding Prohibitive Orders

Pros:

1. Removal of provisions regarding Prohibitive Orders would ensure consistency with international framework principles, the law. and fundamental rights attaching to patents and access to justice

   i. Please refer to our response under Option i, point 2(iv). The 2015 Policy requirement regarding Prohibitive Orders appears inconsistent with US case law which provides there is no categorical rule or presumption against injunctive relief for essential patents. The Federal Circuit has decided in Apple v. Motorola that injunctive relief for both essential and not essential patents is available under the four-factor test of the Supreme Court eBay ruling. The 2015 Policy requirement that essential patent owners to seek injunctive relief only after a second instance ruling on RAND terms appears in neither decision. The 2015 Policy prevents the exercise of a US constitutional right.

   ii. Injunctive relief for essential patents is also available in other jurisdictions. For example, in the EU, the Court of Justice of the European Union has confirmed in Huawei v. ZTE that injunctive relief regarding essential patents is available. The right to injunctive relief for essential patents found valid and infringed has been upheld in numerous rulings of European courts [see among many rulings, Sisvel v. Haier, Federal Court of Justice (Bundesgerichtshof) Case No. KZR 36/17 (5 May 2020); Unwired Planet International Ltd v. Huawei Technologies (UK) Co Ltd [2020] UKSC 37].

2. Removal of provisions regarding Prohibitive Orders would restore balance in licensing negotiations

   i. SDOs are technical bodies, and standards development is a technical cooperation process. The IEEE Patent Policy states that ‘The IEEE is not responsible for determining whether any licensing terms or conditions provided in connection with submission of a Letter of Assurance, if any, or in any licensing agreements are reasonable or non-discriminatory’. It is therefore incongruous that the 2015 Policy restricts (and effectively prevents) the seeking of injunctive relief (‘Prohibitive Orders’). This skews the playing field in favor of unlicensed implementers, and promotes conduct which is not compatible with good faith RAND negotiations.

   ii. It is noted that there is a growing body of law around the imposition of enhanced or exemplary damages on unwilling licensees, as in Core Wireless Licensing S.A.R.L. v. LG Electronics, Inc. (E.D. Tex. 2016, at 2) and SRI International v. Cisco [Case No. 20-1685 (Fed. Cir. 2021)].

   iii. Be that as it may, enhancing damages does not cure the overall impact of losing the right to obtain injunctive relief for an extended period of time.

Cons:

Not applicable.
Comments regarding the ongoing use of the Custom LOA form under this option:

The removal of all Patent Policy provisions regarding Prohibitive Orders would address some, but not all, stakeholder concerns regarding the 2015 Policy. It therefore can reasonably be anticipated that custom LOAs (and negative LOAs) will continue to be used so as not to trigger the bias licensing negotiation framework embodied in a positive LOA associated with the 2015 Policy.
Option ii(b): Remove all optional factors included in the definition of Reasonable Rate

Pros:

1. Definition of Compliant Implementation

i. It is unclear whether Option ii(b) includes the removal of the definition of Compliant Implementation in Section 6.1 and the reference to same in Section 6.2 of the 2015 IEEE Patent Policy. The definition of Compliant Implementation does not add any clarity to the operation of the 2015 Policy. Compliant Implementation as defined may be interpreted to the effect that essential patent owners are obligated to license at the component level even though this interferes with a US Constitutional right; limits freedom to choose (a) licensing partners, and (b) the level in the supply chain where to exhaust patent rights; and makes licensing inefficient. It becomes inefficient because it would require licensing and ongoing management of licensing at various levels of the value chain. The questions arise again as to why a technical standards development body would or should involve itself in market practices and what occurs during licensing negotiations, and favor particular businesses or business models.

ii. As regards the negative impact on IEEE of the factors in the definition of a Reasonable Rate, please refer to our response under Option i, points 2(ii) and (iii). Removing these factors would remedy the imbalanced and adverse effects of the 2015 Policy on IEEE standards development and implementation.

2. Removal of all optional factors included in the definition of Reasonable Rate would ensure consistency with US law and compatibility with other jurisdictions / SDO which are compliant with the TBT Principles

i. Fraunhofer encourages the removal of all optional factors included in the definition of Reasonable Rate because the current 2015 Policy appears to be inconsistent with the case law of US courts. The Federal Circuit in Ericsson v. D-Link determined that a license offer cannot be considered non-FRAND solely because it was calculated on the basis of the end-product price and not the smallest saleable patent-practicing unit (SSPU).

ii. Since the 2015 Policy came into effect, US courts have expressly confirmed that SSPU - which was incorporated in the 2015 Policy - should only be considered an evidentiary principle to assist juries calculating damages in patent infringement trials to apply the statutory principle of apportionment. In FTC v. Qualcomm, the Court expressly rejected the use of the SSPU as a substantive obligation under US antitrust law for standard essential patent owners to calculate RAND rates. Similarly, in HTC v. Ericsson, the Court determined that a license offer based on the end-product price and not the SSPU, does not violate the standard essential patent owner’s RAND undertaking. The 2015 Policy provisions regarding Reasonable Rate were driven by unsubstantiated and incomplete analysis of economic theories of patent hold up and royalty stacking. Neither of these phenomena are assumptions recognized at law. US Courts have clearly stated that if there is to be an allegation that one of these phenomena exists, this allegation must be proven by cogent evidence presented in court and on a case-by-case basis: Ericsson v D-Link.

Cons:

Not applicable.
Comments regarding the ongoing use of the Custom LOA form under this option:

The removal of all Patent Policy optional factors included in the definition of Reasonable Rate would address some, but not all, stakeholder concerns regarding the 2015 Policy. It therefore appears likely that a significant percentage of patent holders will continue to submit LOAs using the custom LOA form, where appropriate, rather than submitting positive LOAs under the 2015 Policy.

Option iii: Offer more options than before by: Allowing an LOA filer the ability to choose whether it may seek or not seek Prohibitive Orders in accordance with the current wording of the Patent Policy; and Clarifying the optionality of the factors included in the definition of Reasonable Rate.

Pros:

1. Option III does not provide the certainty and clarity contained in Option II(a) and Option II(b)
   i. Option ii(a), removal of all imbalanced and restrictive provisions in the 2015 Policy, would be in IEEE’s best interests for the reasons identified above.
   ii. With respect, the idea of making these provisions optional is not a logical solution. IEEE should not be involving itself in commercial negotiations or the exercise of US Constitutional rights. In doing so, IEEE has created a biased licensing negotiation framework.
   iii. Obviously allowing an LOA filer the option to choose whether it may seek or not seek Prohibitive Orders would better align IEEE’s 2015 Policy with the broader international framework and the case law of US courts. The removal of Prohibitive Order provisions altogether as suggested by Option ii ensures even greater clarity and removes the unfair competitive advantage obtained by those not complying with the normal RAND licensing framework.

2. Option III would continue to interfere with licensing negotiations
   i. In this regard, we note that, even if the restrictive provisions in the 2015 Policy were to be demoted to options, they could still impact on licensing negotiations and determination of RAND rates by courts. This applies particularly to the factors for determining a Reasonable Rate.
   ii. IEEE should not be involving itself in commercial negotiations or the exercise of US Constitutional rights. In doing so, IEEE has created a biased licensing negotiation framework. No SDOs is well-placed to provide guidance on the commercial transactions and the rightful conduct of F/RAND negotiating parties. As the 2015 Policy explicitly recognizes: 'IEEE is not responsible for [...] [d] etermining whether any licensing terms or conditions provided in connection with submission of a Letter of Assurance, if any, or in any licensing agreements are reasonable or non-discriminatory' (Section 6.2). To be internally consistent, the 2015 Policy should avoid provisions that interfere with the determination of RAND rates and conditions.
Cons:

Option iii lacks clarity and legal certainty

i. It is artificial to state that Option (b) is ‘clarifying’ the optionality of factors included in the definition of Reasonable Rate. The 2015 Policy has been drafted to be imbalanced and biased. This has not served IEEE, contributors to IEEE, and users of IEEE standards well.

ii. Previously, IEEE has sought to provide clarification in the form of FAQs which address queries raised by IEEE stakeholders. This piece-meal approach, along with numerous amendments to the 2015 Policy, have not resulted in clarity.

iii. Any IEEE FAQs cannot substitute for a clear IPR policy, nor can they be relied upon for governance purposes. IEEE should instead provide clarity and legal certainty through the necessary changes to the 2015 Policy, to ensure that it accords with the international and US requirements for standards development bodies as did the 2007 IEEE Patent Policy.

Comments regarding the ongoing use of the Custom LOA form under this option:

If adopted, Option iii would not address all previously raised stakeholder concerns regarding the 2015 Patent Policy. It therefore appears likely that a significant percentage of patent holders will continue to submit LOAs using the custom LOA form, where appropriate, rather than submitting positive LOAs under the 2015 Policy.
Pros:

Retaining the 2015 revisions to the IEEE-SA patent policy have no pros for IEEE-SA or its standards.

Cons:

In a January 2015 letter addressing the then-proposed 2015 IEEE patent policy, the European Commission noted it has "[long] been advocating a fair balance between the interest of standard essential patent (SEP) holders to be appropriately remunerated for their IP and the interest of implementers of standards to get access to standardised technology on FRAND (fair, reasonable and non-discriminatory) terms". The Commission then observed that the then-proposed 2015 IEEE patent policy language "may risk having a significant impact". It expressed hope that "such a change, and its potential consequences for the standardisation eco-system, would be carefully examined before a decision would be taken to implement it". Notwithstanding this the policy was adopted without such examination.

Regrettably, as predicted by the European Commission, the non-consensus imbalanced 2015 revisions to the IEEE patent policy, that are inconsistent with European and U.S. law, have resulted in numerous negative effects. These include a large number of negative letters of assurance (LOAs) that impinge on the open nature of IEEE standards, and curtail initiatives with other standards development organisations. For example, we understand that, as a result of the negative LOAs, ISO is considering rejecting ISO International Standards status for IEEE-SA standards.

These negative implications are the reason why, on 3 May 2021 IP Europe welcomed this overdue review of IEEE’s unprecedented “reasonable rate” and “prohibitive order” provisions: https://www.iptalks.eu/position-papers/ip-europe-and-innovation-alliance-welcome-ieees-review-of-the-2015-patent-policy-and-urge-removal-of-unbalanced-language/. We believe removal of all the 2015 patent policy revisions will rebalance the IEEE-SA patent policy and fully restore the integrity of its standards and reputation.

Comments regarding the ongoing use of the Custom LOA form under this option:
While we believe removal of all the 2015 patent policy revisions is the best way to rebalance the IEEE-SA patent policy and fully restore the integrity of its standards and reputation, we believe removal of some of the problematic 2015 revisions language is preferable to doing nothing.

Option ii(a): Remove all of the Patent Policy provisions regarding Prohibitive Orders

Pros:

While we believe removal of all the 2015 patent policy revisions is the best way to rebalance the IEEE-SA patent policy and fully restore the integrity of its standards and reputation, we believe removal of some of the problematic 2015 revisions language is preferable to doing nothing.

Cons:

There are no cons for IEEE-SA in removing that language.

Comments regarding the ongoing use of the Custom LOA form under this option:

Option ii(b): Remove all optional factors included in the definition of Reasonable Rate

Pros:

While we believe removal of all the 2015 patent policy revisions is the best way to rebalance the IEEE-SA patent policy and fully restore the integrity of its standards and reputation, we believe removal of some of the problematic 2015 revisions language is preferable to doing nothing.

Cons:

There are no cons for IEEE-SA in removing that language.

Comments regarding the ongoing use of the Custom LOA form under this option:

Option iii: Offer more options than before by: Allowing an LOA filer the ability to choose whether it may seek or not seek Prohibitive Orders in accordance with the current wording of the Patent Policy; and Clarifying the optionality of the factors included in the definition of Reasonable Rate.

Pros:

Cons:
Comments regarding the ongoing use of the Custom LOA form under this option:
Option i: No change to the text of the 2015 Patent Policy

Pros:

Since 2015, the IEEE’s patent policy has enhanced interoperability, innovation, and consumer reliance on the 802.11 (Wi-Fi) and 802.3 (Ethernet) standards. Abandoning key provisions, such as restrictions on prohibitive orders and guidance on the reasonable rate determination, would encourage abusive licensing practices and litigation tactics, erode existing clarity in the market and the courts, and depress innovation while inflating prices for compliant products and services. There is no legitimate reason to change the IEEE’s patent policy in ways that would harm innovators, courts, and consumers.

The 2015 Patent Policy has been enormously successful in achieving its goal: greater clarity for the IEEE’s community and affected stakeholders. Clarity is important because it allows businesses to invest in the standard and commercialize compliant goods and services with some level of certainty that they will not be vulnerable to licensing abuses after those investments have been made. The less clear a policy is, the more difficult it will be for market participants to agree on a baseline for its application, and the more likely SEP litigation will be.

Empirical evidence strongly indicates the IEEE’s patent policy has been a success at enhancing clarity and preventing excessive SEP litigation. According to one recent study, cellular standards governed by more ambiguous FRAND rules, such as those subject to the intellectual property rights policy of the European Telecommunication Standards Institute (ETSI), are responsible for roughly 75% of all SEP litigation. By contrast, IEEE standards are only responsible for approximately 2% of SEP litigation. Even if the differences between the IEEE and ETSI patent policies are not solely responsible for that difference, the fact that there are no readily apparent alternative explanations makes it reasonable to conclude they play an important role in producing such strikingly different rates of SEP litigation.

For years leading up to 2015, the IEEE’s members worked on changes to the bylaws that would provide greater clarity for its community and affected stakeholders. After many rounds of negotiations over the course of about two years, the IEEE’s patent committee, board of directors, and super majorities of the IEEE SA standards board and board of governors approved the changes that are now in place. The best evidence available today confirms the IEEE’s open governance process succeeding in achieving its goal of greater clarity. Now that the Department...
Comments regarding the ongoing use of the Custom LOA form under this option:

Use of the Custom LOA should not be permitted for projects initiated after March 2015 because all parties involved knew, or should have known, the terms of the IEEE’s patent policy when joining such projects. Permitting such use for projects initiated after that policy was in effect would allow parties to evade its terms whenever they choose, eroding the certainty and clarity it has supported to date.

Option ii(a): Remove all of the Patent Policy provisions regarding Prohibitive Orders

Pros:

None.

Cons:

Removing all provisions regarding prohibitive orders would be fatal to the proper functioning of the FRAND licensing system.

The cornerstone of the FRAND licensing system is the requirement that SEP holders offer licenses to all willing licensees. If parties cannot reach agreement on licensing terms, they can engage in negotiation, arbitration, or litigation, but SEP holders cannot resort to prohibitive orders to force licensees to agree to terms they would not otherwise accept. Prohibitive orders do not facilitate resolution of licensing disputes on FRAND terms. They give SEP holders the power to make licensees choose between agreeing to their demands and withholding or withdrawing products and services from the market. In other words, prohibitive orders allow SEP holders to exercise hold up power over licensees (and their customers) to coerce them into unfair, unreasonable, and/or discriminatory licenses.

Because prohibitive orders leverage the threat of market exclusion, they threaten consumers of compliant products and services as well as suppliers. This threat must not be taken lightly. Millions of people rely on the IEEE’s 802.11 (Wi-Fi) and 802.3 (Ethernet) standards to communicate remotely with employers, teachers, family members, nurses, and doctors. Hundreds of municipalities, small communities, and tribal networks provide WiFi or Ethernet access to people who could not otherwise afford or obtain network access. The COVID-19 pandemic has made affordable reliable access to these networks more important than ever. The IEEE’s current policy protects people from losing access due to injunctive orders or unaffordable prices resulting from non-FRAND license terms.

There is no justification for changing the rules to permit a handful of SEP holders to threaten access to communication standards that are essential to the lives and livelihoods of so many people at such a critical time. The safest and fairest solution is the same today as it was in 2015: the IEEE should preserve the rules that have successfully reduced uncertainty and the frequency of licensing disputes.

Comments regarding the ongoing use of the Custom LOA form under this option:

See comments regarding the ongoing use of the Custom LOA in response to Option i.
Option ii(b): Remove all optional factors included in the definition of Reasonable Rate

**Pros:**

None.

**Cons:**

<table>
<thead>
<tr>
<th>The IEEE’s decision to identify optional factors for the reasonable rate determination has succeeded in bringing clarity to the market and protection against market failures that result from royalty stacking and patent holdup. This clarity has made markets more efficient by giving implementers the predictability they need to allocate resources appropriately and optimize investment in development. It has also made SEP litigation more efficient by giving courts guidance to consult when making FRAND determinations. This clarity has, in turn, benefited consumers by giving them access to more innovative and affordable products and services capable of implanting the IEEE’s standards.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Removing all optional factors would reverse these beneficial developments. Without any guidance as to what a “reasonable rate” is, implementers would lack the certainty they need to invest and allocate resources appropriately. The lack of certainty would make litigation more likely and unpredictable. Courts might regard the removal of these optional factors as a renunciation of their relevance, upending settled precedents and clarity that has developed through case law since 2015. The result would be less efficient investment, more unnecessary litigation, and higher prices for consumers.</td>
</tr>
<tr>
<td>Notably, the companies that led, and continue to lead, the opposition to the 2015 Patent Policy—Nokia Corp., Ericsson Inc., InterDigital Inc. and Qualcomm Inc—are historically responsible for filing the greatest number of SEP lawsuits. That means the companies that have most often sought to exploit the lack of clarity in SEP licensing rules are the same companies that most consistently oppose the IEEE’s efforts to provide market clarity. The IEEE rightly rejected their self-serving objections to its efforts in 2015 and should do so again.</td>
</tr>
</tbody>
</table>

**Comments regarding the ongoing use of the Custom LOA form under this option:**

See comments regarding the ongoing use of the Custom LOA in response to Option i.

Option iii: Offer more options than before by: Allowing an LOA filer the ability to choose whether it may seek or not seek Prohibitive Orders in accordance with the current wording of the Patent Policy; and Clarifying the optionality of the factors included in the definition of Reasonable Rate.

**Pros:**

None.
Cons:

Allowing LOA filers to choose whether they may seek prohibitive orders is effectively the same as removing the current provisions altogether. As discussed above, prohibitive orders are inconsistent with the fundamental requirement of the FRAND licensing system—that SEP holders grant fair, reasonable, and nondiscriminatory licenses to implementers who seek them.

The current policy permits SEP holders to seek prohibitive orders when an “implementer fails to participate in, or to comply with the outcome of, an adjudication . . . by one or more courts that have the authority to: determine Reasonable Rates and other reasonable terms and conditions; adjudicate patent validity, enforceability, essentiality, and infringement; award monetary damages; and resolve any defenses and counterclaims.”

If an implementer participates in and is willing to comply with the outcome of such adjudications, SEP holders cannot seek prohibitive orders without undermining the FRAND licensing system. Permitting them to do so is tantamount to approving exclusionary, anticompetitive conduct.

Clarifying the optionality of the reasonable rate factors is unnecessary because their optionality is already clear. The IEEE-SA Patent Policy explicitly states that the reasonable rate determination “need not be limited to” those three factors. Given the explicit statement that other factors may be considered, the only way to clarify the optionality of the listed factors would be to clarify when they can be disregarded. Providing clarity about when courts and parties may disregard these factors will effectively give them permission to do so.

The listed factors are crucial safeguards that prevent the value of standardization and cost of litigation from inflating license rates beyond the value of the patented features at issue. If the IEEE explicitly gives permission to disregard those safeguards, the result will be more uncertainty, more litigation, higher license rates, higher consumer prices, and over time, less use of the IEEE’s standards. The IEEE can and should prevent these harmful consequences, by preserving the changes made in 2015, including the optional, non-exhaustive criteria for determining reasonable license rates.

Comments regarding the ongoing use of the Custom LOA form under this option:

See comments regarding the ongoing use of the Custom LOA in response to Option i.
Option i: No change to the text of the 2015 Patent Policy

Pros:

There are no pros to retaining the 2015 Patent Policy because it should not be retained by IEEE-SA. It was wrong when it was adopted, and it has since failed as a result. Ultimately, it has caused harm to the IEEE-SA in both its ability to adopt standards and its highly regarded reputation as an SDO.

Cons:

The 2015 Patent Policy has failed because it was not derived from actual legal and economic conditions in the innovation industries, but rather from academic theories that were unproven at the time they were formulated and whose predictions have consistently proven false in the ensuing years (see https://academic.oup.com/jcle/article/13/1/1/3060409). The 2015 Patent Policy was a classic example of a "solution in search of a problem." Given this disconnect between the 2015 Patent Policy and the real-world legal rights and market conditions in the commercialization of standardized technologies, the result has been that the 2015 Patent Policy has caused significant harm to IEEE-SA standards and to the goodwill of the IEEE-SA as an SDO. This is evidenced by, among others:

(1) the conflict of the 2015 Patent Policy with statutory patent rights and the overwhelming weight of court decisions concerning both the legitimately open-ended nature of FRAND commitments (http://www.georgemasonlawreview.org/wp-content/uploads/2014/06/Wright-Website-Version.pdf), the marketplace-based determination of reasonable royalties (https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3447641), and the legal right of an owner of a patent deemed to be essential in practicing a standard to seek injunctive relief (https://ssrn.com/abstract=2515949);

(2)a letter to the IEEE from the U.S. Department of Justice that identified numerous negative effects of the 2015 Patent Policy, including, among others, its misuse by antitrust authorities in other countries, it contributed to a misunderstanding of patent owner’s legal rights, and this misunderstanding contributed to the lack of balance between innovators and implementers in both SDO processes and in the commercial deployment of standardized technologies (https://www.justice.gov/atr/page/file/1315291/download);

(3)given these conflicts with law, policy, and commercial practices, the 2015 Patent Policy immediately resulted in a large number of negative LOAs compared to negative LOAs submitted before 2015, and the significant number of negative LOAs continue to this day; and

(4)as a result of these significant negative LOAs, the IEEE-SA has now lost ANSI ANS approval for the IEEE 802.11 standard.
Comments regarding the ongoing use of the Custom LOA form under this option:

**Option ii(a): Remove all of the Patent Policy provisions regarding Prohibitive Orders**

**Pros:**
Removing all the provisions concerning Prohibitive Orders would at least be a step in the right direction for the 2015 Patent Policy in eliminating the fundamental conflicts between the “patent holdup” theory instantiated in the 2015 Patent Policy and the legal rights and proven marketplace conditions and licensing activities in the U.S. and globally. Ultimately, the IEEE-SA should return back to the earlier policies that created a stable, reliable, and balanced foundation for the explosive growth in wireless technologies and ultimately the mobile revolution. As prominent economists, law professors, and former government officials wrote in a 2018 letter to the U.S. Department of Justice: “It bears emphasizing that no empirical study has demonstrated that a patent-owner’s request for injunctive relief after a finding of a defendant’s infringement of its property rights has ever resulted either in consumer harm or in slowing down the pace of technological innovation” [https://cpip.gmu.edu/wp-content/uploads/sites/31/2018/02/Letter-to-DOJ-Supporting-Evidence-Based-Approach-to-Antitrust-Enforcement-of-IP.pdf](https://cpip.gmu.edu/wp-content/uploads/sites/31/2018/02/Letter-to-DOJ-Supporting-Evidence-Based-Approach-to-Antitrust-Enforcement-of-IP.pdf). This letter also contains an Appendix that lists numerous rigorous empirical studies performed according to scientific norms for research that confirm the absence of systemic evidence that confirms any prediction of "patent holdup" theory. Many more have been published since this time, including some referenced in links in my answer to Option i.

**Cons:**
There are no cons in removing the provisions concerning Prohibitive Orders.

Comments regarding the ongoing use of the Custom LOA form under this option:

**Option ii(b): Remove all optional factors included in the definition of Reasonable Rate**

**Pros:**

**Cons:**

Comments regarding the ongoing use of the Custom LOA form under this option:
Option iii: Offer more options than before by: Allowing an LOA filer the ability to choose whether it may seek or not seek Prohibitive Orders in accordance with the current wording of the Patent Policy; and Clarifying the optionality of the factors included in the definition of Reasonable Rate.

Pros:

None

Cons:

Comments regarding the ongoing use of the Custom LOA form under this option:
Option i: No change to the text of the 2015 Patent Policy

Pros:

- Intel and most other contributors of technology to IEEE standards value the 2015 Policy.

- Statistics including record numbers of standards, new standardization projects, technical contributions, and new members since 2015 bear out the Policy’s positive effect. See the references below for detailed information.

- Nearly every person benefits from and depends on IEEE standards. Representatives of all sorts of businesses representing tens of millions of US Jobs and trillions of dollars to the GDP continually express their support of the 2015 Policy.

- Positive statements and practical implementation of IEEE standards abound, despite limited complaints from a handful of companies. Several of which contributed little to IEEE standards development.

- The Policy benefits both IEEE and IEEE members, in dealing with fewer disputes while maintaining compliance with applicable US and international competition law.

Averaging over ~9000 technical contributions per year, Intel is one of the most prolific contributors to IEEE Standards. Intel values the fair and balanced safeguards the 2015 Policy provides for the IPR contributors and users of IEEE standards. Intel is not alone in its appreciation. The 2015 Policy has contributed significantly to IEEE’s success. Since enactment, IEEE membership has increased, annual projects (PARs) have increased, IEEE membership has increased, and contributions to IEEE standards have increased.

Various empirical studies have evaluated the beneficial effect of the Patent Policy for IEEE. Such studies that we are aware of are:


As discussed and documented in these materials, almost all of the leading contributors to IEEE
standards, including Intel, have been supportive of the IEEE Patent Policy. At the time the Patent Policy was approved, an overwhelming number of IEEE stakeholders expressed their support. See, e.g., January 30, 2015, Multi-Stakeholder Letter to IEEE. We understand that IEEE likewise received multiple letters of support from other stakeholders and key IEEE contributors, such as Marvell, Broadcom, Cisco, Samsung, Verizon, and Vizio. And we understand that even non-technology entities – such as the National Retail Foundation, which represents more than 42 million American jobs and $2.5 trillion in annual GDP – also expressed their support. See August 15, 2014, NRF letter to IEEE. Since that time, support for the Patent Policy has continued to be robust among mainstream industry stakeholders. See December 3, 2021, Joint Stakeholder letter to IEEE.

The IEEE continues to enjoy a small number of disputes and litigation around its standards compared to other standards organizations that have followed a less informed approach in their IPR policies. For example, one study found that despite their widespread adoption, IEEE standards are responsible for only about 2% of relevant litigation involving standard-essential patents. See Carrier& Scarpelli, How Standard-Setting Orgs Can Curb Patent Litigation, available at https://www.law360.com/articles/1392222/how-standard-setting-orgs-can-curb-patent-litigation. The authors attributed this experience primarily to the clarity and certainty provided by IEEE’s Patent Policy.


In short, the IEEE Patent Policy provides fundamental, critical benefits to IEEE, IEEE members, users of IEEE standards, and consumers.

Cons:

Intel does not believe that there are any "cons" to maintaining the 2015 Patent Policy.

As addressed above, the Patent Policy is functioning to support and clarify obligations of IEEE Members, and to promote competition, development, and innovation in around IEEE standards. As a leading innovator for, and contributor to, IEEE standards, Intel Corporation can affirm that the IEEE Patent Policy has served to promote development of IEEE standards, investment in IEEE technologies, and promulgation of IEEE standard-compliant devices. The added clarity in the 2015 policy has benefitted everyone who relies upon IEEE standards.
Comments regarding the ongoing use of the Custom LOA form under this option:

The custom LOA form was necessary to bridge the expectations of IPR contributors for PARs initiated before the effective date of the Patent Policy.

This exception allowed parties that joined projects subject to prior IEEE policies to continue to work on such projects under the rules applicable when the project began. For new projects initiated after adopting the Patent Policy, the considerations are clear, and there is no need to allow for custom LOAs. In such future circumstances, parties contributing to the IEEE standards should be subject to the current IPR policy and the availability of a custom LOA form terminated.

Option ii(a): Remove all of the Patent Policy provisions regarding Prohibitive Orders

Pros:

Intel does not see any benefits from such an approach.
Cons:

- Removes clear direction and a significant motivating factor from many/most technical contributors.

- Impedes competition and harms consumers while disproportionally benefiting a small group of companies.

- Abuse impedes adoption and limits resources available to support further innovation.

- Increases legal risks to IEEE and its members.

The Policy’s clear direction on the appropriate use of prohibitive orders provides a balanced and competitive licensing environment for all IPR holders and implementers of IEEE standards. For information on Intel’s and other companies’ motivations to contribute to IEEE standards, see our answers to Survey Option 1. It makes no sense for IEEE to eliminate a prime consideration that encourages its most significant contributors and protects the public from increased costs resulting from inappropriate prohibitive orders.

Removal would impede competition and harm consumers by providing significant licensing negotiation advantages only to a small subset of IPR holders. The 2015 Policy allows for fair compensation for all IPR holders without using the threat of an injunction to leverage non-RAND terms or extract royalty payments that would exceed the value of the invention. The 2015 provisions prevent “hold up” tactics used to force licensing based on the cost of market exclusion (rather than the value of the relevant patents).

Inappropriate and anti-competitive use of prohibitive orders discourages the adoption of standards by raising the legal and financial risks to build implementing products. When such strategies collect unwarranted funds based on the fear of market exclusion and not the value of the invention, those funds are no longer available for product development and other innovation. This windfall for a few can severely hobble production and severely damage the potential for new and innovative products and markets that benefit everyone.

Expanded aggressive use of Prohibitive Orders could also embroil the IEEE in private litigation and regulatory investigations/actions.

Comments regarding the ongoing use of the Custom LOA form under this option:

The custom LOA form was necessary to bridge the expectations of IPR contributors for PARs initiated before the effective date of the Patent Policy.

This exception allowed parties that joined projects subject to prior IEEE policies to continue to work on such projects under the rules applicable when the project began. For new projects initiated after adopting the Patent Policy, the considerations are clear, and there is no need to allow for custom LOAs. In such future circumstances, parties contributing to the IEEE standards should be subject to the current IPR policy and the availability of a custom LOA form terminated.
Option ii(b): Remove all optional factors included in the definition of Reasonable Rate

Pros:

Intel does not see any benefits from such an approach.

Cons:

- Reduces and obscures available information on rates making it more difficult to determine RAND licensing.

The lack of information around what could be a “reasonable rate” is a significant weakness of many SDO patent policies that can lead to expensive and time-consuming litigation. The 2015 Policy encourages predictability and fairness by highlighting considerations helpful in examining reasonable and non-discriminatory licensing practices. The US DOJ recognized that the Policy’s treatment of Reasonable Rates provisions could provide reasonable royalties that appropriately compensate the Patent Holder. The Department noted:

“The [Patent Policy’s] Reasonable Rate definition provides additional clarity regarding the IEEE RAND Commitment, which could help speed licensing negotiations, limit patent infringement litigation, enable parties to reach mutually beneficial bargains that appropriately value the patented technology, and lead to increased competition among technologies for inclusion in IEEE standards. Consistent with U.S. case law, the definition appears designed to help ensure that reasonable royalties for patents that are essential to an IEEE standard, like royalties for other patents, compensate the patent holder for the value attributable to the essential patent or patents.”


Comments regarding the ongoing use of the Custom LOA form under this option:

The custom LOA form was necessary to bridge the expectations of IPR contributors for PARs initiated before the effective date of the Patent Policy.

This exception allowed parties that joined projects subject to prior IEEE policies to continue to work on such projects under the rules applicable when the project began. For new projects initiated after adopting the Patent Policy, the considerations are clear, and there is no need to allow for custom LOAs. In such future circumstances, parties contributing to the IEEE standards should be subject to the current IPR policy and the availability of a custom LOA form terminated.

Option iii: Offer more options than before by: Allowing an LOA filer the ability to choose whether it may seek or not seek Prohibitive Orders in accordance with the current wording of the Patent Policy; and Clarifying the optionality of the factors included in the definition of Reasonable Rate.

Pros:

Intel does not see any benefits from such an approach. The 2015 Policy is already clear that the additional factors are optional. No change to the policy is needed.
Cons:

- Leads to inappropriate use and leverage of Prohibitive Orders.
- Bifurcation of licensing obligations would lead to confusion and disadvantage most members.
- Potential to create competition problems.
- Allows members and contributors to block the standard.

Allowing some members to avoid the reasonable limitations on Prohibitive Orders is contrary to the interests of IEEE, its members, and users/consumers of IEEE standards. Allowing any party carte blanche to use unreasonable tactics would be unconscionable. See the reasons given in our response to Option ii(a) above.

- Removes clear direction and a significant motivating factor from many/most technical contributors.
- Impedes competition and harms consumers while disproportionately benefiting a small group of companies.
- Abuse impedes adoption and limits resources available to support further innovation.
- Increases legal risks to IEEE and its members.

Bifurcation of important licensing obligations creates a complex licensing environment that would lead to confusion. Allowing the use of Prohibitive Orders would likely conflict with local laws, such as eBay in the US. Anyone implementing an IEEE standard would need to contemplate how the multiple different obligations would affect the viability and competitiveness of their products.

LOA submitters electing to respect limitations on Prohibition Orders could be targeted by those who would have no such obligation. New complex rules would need to address reciprocity and non-discrimination. Negotiating parties must be allowed to operate under the other party's commitment.

The threat of market exclusion would drive up the costs to produce standards-compliant products beyond the value of the invention. The resulting cost burden would harm competition and users/consumers of standards-compliant products.

The purpose of the Letter of Assurance is to verify the commitment to offer licenses on at least RAND terms. Allowing an individual LOA filer to use Prohibitive Orders without restraint could exclude companies/competitors from markets, defeat the LOA's primary purpose, and raise antitrust concerns.

Finally, the Policy and its supporting documents already addressed the optionality of the factors.
Comments regarding the ongoing use of the Custom LOA form under this option:

The custom LOA form was necessary to bridge the expectations of IPR contributors for PARs initiated before the effective date of the Patent Policy.

This exception allowed parties that joined projects subject to prior IEEE policies to continue to work on such projects under the rules applicable when the project began. For new projects initiated after adopting the Patent Policy, the considerations are clear, and there is no need to allow for custom LOAs. In such future circumstances, parties contributing to the IEEE standards should be subject to the current IPR policy and the availability of a custom LOA form terminated.
Pros: None.

Cons:

It is undisputed that after the adoption of the 2015 Patent Policy ("PP"), the number of negative LOAs has increased dramatically and continues to remain high. Such drastic result signals an apparent imbalance in the 2015 PP itself. Accordingly, changes should be made so that IEEE can provide an increased assurance to the market for accessing the standardized technologies it help developed.

Comments regarding the ongoing use of the Custom LOA form under this option:

The Custom LOA form is not a viable long term solution as it does not meaningfully address the apparent imbalance introduced in the 2015 PP. At best, the Custom LOA provides an inconsistent and confusing piecemeal solution to the 2015 PP. On the other hand, the Custom LOA can be used effectively to reduce the number of negative LOAs, if it provides the patent holders with the freedom, discretion, and without any time limitations, to choose whether to provide IPR assurance under either a.) 2015 PP or b.) the PP in effect immediately prior to the 2015 PP (i.e., at the time when the level of positive assurance was high) for any projects associated with IEEE.
Option ii(a): Remove all of the Patent Policy provisions regarding Prohibitive Orders

Pros:

The change in 2015 to dis-allow Prohibitive Orders ("POs") is a key factor that lead many technology contributors (i.e., SEP holders) to refrain from providing positive LOAs under the 2015 Patent Policy. To restore IEEE’s standing as a balanced SSO, there is a need to restore the number of positive LOAs to a higher level (e.g., pre-2015 level). To that end, removing the ban on POs is sensible. POs result from the exercise of a legally conferred right by the patent owner. Since 2015, relevant jurisprudence has significantly developed to provide guidance to SEP licensing under RAND terms and conditions. Under this jurisprudence the granting of POs involving SEPs are the exceptions and not the norm. At the same time, the availability of POs can serve to encourage SEP owners and implementers to proactively engage in bilateral discussions and to ensure that good faith implementers are not placed in a competitive disadvantage vis-a-vis an unwilling implementer. The Option ii(a) changes should be implemented in combination with changes to Option ii(b).

Cons:

None.

Comments regarding the ongoing use of the Custom LOA form under this option:

The Custom LOA form is not a viable long term solution as it does not meaningfully address the apparent imbalance introduced in the 2015 PP. At best, the Custom LOA provides an inconsistent and confusing piecemeal solution to the 2015 PP. On the other hand, the Custom LOA can be used effectively to reduce the number of negative LOAs, if it provides the patent holders with the freedom, discretion, and without any time limitations, to choose whether to provide IPR assurance under either a.) 2015 PP or b.) the PP in effect immediately prior to the 2015 PP (i.e., at the time when the level of positive assurance was high) for any projects associated with IEEE.

Option ii(b): Remove all optional factors included in the definition of Reasonable Rate

Pros:

The change in 2015 to introduce factors, even though labelled "optional", into the Reasonable Rate definition is one factor why SEP holders refrain from providing positive LOAs under the 2015 Patent Policy. To restore IEEE’s standing as a balanced SSO, there is a need to restore the number of positive LOAs to a higher level (e.g., pre-2015 level). Defining a Reasonable Rate at SSO level may not be appropriate as RAND is a range and there are various commercially and judicially accepted methods to determine a reasonable royalty. The definition of "Compliant Implementation," in particular, needs to be removed or changed as it allows "partial implementations" to benefit from a RAND assurance though this should apply to fully compliant products only. The Option ii(b) changes should be implemented in combination with changes to Option ii(a).
Cons:

None.

Comments regarding the ongoing use of the Custom LOA form under this option:

The Custom LOA form is not a viable long term solution as it does not meaningfully address the apparent imbalance introduced in the 2015 PP. At best, the Custom LOA provides an inconsistent and confusing piecemeal solution to the 2015 PP. On the other hand, the Custom LOA can be used effectively to reduce the number of negative LOAs, if it provides the patent holders with the freedom, discretion, and without any time limitations, to choose whether to provide IPR assurance under either a.) 2015 PP or b.) the PP in effect immediately prior to the 2015 PP (i.e., at the time when the level of positive assurance was high) for any projects associated with IEEE.

Pros:

None.

Cons:

The suggested additional options do not mitigate the basic and all concerns with the 2015 PP. As noted in the previous questions, e.g. the "Compliant Implementation" definition is an issue as well, which is not mitigated by any of the proposed additions.

Comments regarding the ongoing use of the Custom LOA form under this option:

The Custom LOA form is not a viable long term solution as it does not meaningfully address the apparent imbalance introduced in the 2015 PP. At best, the Custom LOA provides an inconsistent and confusing piecemeal solution to the 2015 PP. On the other hand, the Custom LOA can be used effectively to reduce the number of negative LOAs, if it provides the patent holders with the freedom, discretion, and without any time limitations, to choose whether to provide IPR assurance under either a.) 2015 PP or b.) the PP in effect immediately prior to the 2015 PP (i.e., at the time when the level of positive assurance was high) for any projects associated with IEEE.
Option i: No change to the text of the 2015 Patent Policy

Pros:

The current IEEE-SA Patent Policy was adopted in 2015 with broad support of IEEE-SA participants and stakeholders and with super-majorities at multiple levels of the IEEE’s governance structure. It brought clarity to both standard-essential patent (SEP) owners and implementers of IEEE standards regarding the criteria under which an SEP owner may seek prohibitive orders and the criteria for valuation of an SEP. Significantly, it clarified that (i) patent owners could only seek prohibitive or injunctive relief if a standard implementer failed to comply with an adjudication and (ii) the value of an SEP was to be judged on the value of the patented functionality related to the smallest saleable standard practicing unit. The 2015 Patent Policy has been successful in facilitating the mission of IEEE and its members. Opponents have not presented any reasoned basis to change a successful policy.

Cons:

None

Comments regarding the ongoing use of the Custom LOA form under this option:

The Custom LOA was created to account for contributions to IEEE-SA projects initiated prior to March 2015 and thus, can be supported for such projects. However, for all IEEE-SA projects initiated after the adoption of the IEEE-SA Patent Policy, there is no justification for the Custom LOA since all parties would have been aware of the policy at the time they joined the project.

Option ii(a): Remove all of the Patent Policy provisions regarding Prohibitive Orders

Pros:

None
Cons:

The current IEEE-SA Patent Policy is very clear regarding the limited circumstances in which an SEP owner may seek Prohibitive Orders. Such policy is consistent with IEEE’s mission to foster broad adoption of the standard, to facilitate interoperability, and to spur further innovation. Removing these provisions will re-introduce ambiguity in the policy and open up the possibility (or potentially incentivize) that those complying with IEEE-SA standards will be subject to SEP hold-up and/or supra-FRAND royalties. Thus, Option 2(a) would have negative consequences for no discernable benefit to the membership at large.

Comments regarding the ongoing use of the Custom LOA form under this option:

The Custom LOA was created to account for contributions to IEEE-SA projects initiated prior to March 2015 and thus, can be supported for such projects. However, for all IEEE-SA projects initiated after the adoption of the IEEE-SA Patent Policy, there is no justification for the Custom LOA since all parties would have been aware of the policy at the time they joined the project.

Pros:

Option ii(b): Remove all optional factors included in the definition of Reasonable Rate

Pros:

None
Cons:

The current IEEE-SA Patent Policy provides much-needed guidance regarding the considerations appropriate to valuing SEPs in the context of the FRAND commitment. The guidance as to a reasonable (FRAND) rate helps to promote predictability and fairness in licensing negotiations. Removing such guidance will re-introduce ambiguity as to the meaning of FRAND and invite prolonged negotiations and time-consuming and resource-draining litigation arguing over the removed factors. Thus, Option 2(b) would have negative consequences for no discernable benefit to the membership at large.

Comments regarding the ongoing use of the Custom LOA form under this option:

The Custom LOA was created to account for contributions to IEEE-SA projects initiated prior to March 2015 and thus, can be supported for such projects. However, for all IEEE-SA projects initiated after the adoption of the IEEE-SA Patent Policy, there is no justification for the Custom LOA since all parties would have been aware of the policy at the time they joined the project.

Option iii: Offer more options than before by: Allowing an LOA filer the ability to choose whether it may seek or not seek Prohibitive Orders in accordance with the current wording of the Patent Policy; and Clarifying the optionality of the factors included in the definition of Reasonable Rate.

Pros:

None

Cons:

As previously noted, allowing SEP owners to choose to seek prohibitive orders without restriction undermines the very concept of FRAND licensing and undermines every mission of IEEE-SA. Moreover, allowing certain members to opt out of the restrictions on Prohibitive Orders would also allow those members to block implementation of the standard. The current Patent Policy carefully and fairly balances the SEP owner’s ability to receive compensation commensurate with the value of its patented contribution and the implementer’s ability to use the standard without fear of subsequent hold-up. Such results would undermine every mission of the IEEE-SA for no discernable benefit to the membership at large.

“Clarifying” the optionality of the factors included in the definition of reasonable rate is unnecessary. Rather than providing clarity, modification of the current Patent Policy regarding reasonable rate would lead to confusion and complication of licensing negotiations. Thus, Option 3 would lead to negative consequences for no discernable benefit to the membership at large.

Comments regarding the ongoing use of the Custom LOA form under this option:

The Custom LOA was created to account for contributions to IEEE-SA projects initiated prior to March 2015 and thus, can be supported for such projects. However, for all IEEE-SA projects initiated after the adoption of the IEEE-SA Patent Policy, there is no justification for the Custom LOA since all parties would have been aware of the policy at the time they joined the project.
Option i: No change to the text of the 2015 Patent Policy

Pros:

Cisco engineers regularly participate in standards development at IEEE-SA, across a range of working groups. Cisco has been a leading contributor to 802.1 (network security), 802.3 (Ethernet), and 802.11 (Wi-Fi), among numerous other IEEE-SA Working Groups. Cisco engineers also regularly participate in a wide variety of other standards development organizations across computing, networking, rich media, and telecommunications. Those organizations vary in formality and in the IPR policies they use.

Cisco thanks the BoG for the opportunity to share our views with the BoG and the broader community of participants in standards development at IEEE.

Cisco was a strong proponent of the 2015 Patent Policy Updates. As many BoG members will recall, the 2015 Patent Policy Updates were approved following super-majority votes at multiple levels within the Standards Association and at the IEEE Board of Directors, and in the face of aggressive lobbying by opponents (see, for example, the website www.advancingengineering.org) as the Updates were discussed at different levels within the Standards Association and, ultimately, by the IEEE Board of Directors. The companies that opposed the 2015 Patent Policy Updates, most of which have business models reliant on patent licensing, responded to the decision to approve the 2015 Patent Policy Updates with an ongoing campaign to attack the process that led to the adoption of the updates and to disparage IEEE-SA.

Part of the campaign to disparage IEEE-SA has been the creation of a false narrative that the 2015 Patent Policy Updates have led to less innovation within IEEE-SA. The facts introduced to support this narrative invariably focus on the increased use of “negative LoAs”, particularly in relation to IEEE 802.11. This line of argument is misleading in a number of respects:

• First, we should recognize that this argument is an exercise in circular reasoning. The same small group of companies both submit negative LoAs and point to the negative LoAs they submit as “proof” that the 2015 Patent Policy Updates have deterred “innovators” (a category in which they implicitly include themselves and exclude companies that do not have the same business model they do) from licensing patents under the updated policy.

• Second, even a casual review of LoAs submitted in relation to IEEE 802.11, IEEE 802.3, and other IEEE standards reveals that the great majority of participants take advantage of the option under the IEEE-SA Patent Policy to provide LoAs that do not identify specific patents. Just looking at LoAs submitted in connection with IEEE 802.11 since March 15, 2015 reveals numerous blanket LoAs that commit to license essential patents, submitted by (among others) Apple, Broadcom, Cisco, ETRI, Intel, Korea Telecom, Mediatek, and NXP. Focusing the analysis of LoAs covering IEEE 802.11 to just negative LoAs, submitted by a small group of companies with business models based on patent monetization, biases the sample in a way that no responsible engineer would permit in any technical
analysis he or she submitted to support a technical contribution made to the Standards Association. Companies with patent licensing models, the same companies that opposed the 2015 Patent Policy Updates, have submitted a variety of LoAs refusing to license. Their refusal to license says nothing about the behavior of the many other participants in the IEEE 802.11 WG, to say nothing of the interests of most implementers of Wi-Fi. Of course, once we move beyond Wi-Fi, to other families of LAN/MAN standards, the number of negative LoAs submitted is near zero. Notably, there is not a single negative LoA in relation to IEEE 802.1, a fundamental standard that describes core networking technologies implemented across both terrestrial and wireless networks.

Third, the “research” attempting to link negative LoAs with a purported decline in “innovation” in the IEEE 802.11 WG is opposed by rigorous analyses showing the opposite. Notable in this regard is a 2019 report from IPlytics that finds, among other things, that “[t]he number of technical contributions submitted in IEEE 802 working groups has continued to increase since the IEEE patent policy updates, and was in 2018 at the highest level in IEEE’s history.” [link](https://www.iplytics.com/wp-content/uploads/2019/01/IEEE-contribution-analysis_IPlytics-2019.pdf) (at page 2).

More generally, academic literature examining the impact of changes to IPR policies on participation or contributions has not shown a strong effect one way or the other. For example, reviewing the impact of a 2007 change to the patent policy at the VME Bus International Trade Association (VITA), a standards development organization active in the area of computer bus technology, Professor Jorge Contreras surveyed participants at VITA and found that more than 80 percent found the reforms to the policy, which included mandatory ex ante disclosure of maximum licensing terms, helpful. [Contreras](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2249926). Professor Contreras concluded that the predictions of participants at VITA that adoption of the ex ante disclosure requirement would harm innovation at VITA had not come true.

Similar predictions made by opponents of the 2015 Patent Policy Updates have also proven inaccurate. Following the February 2015 vote of the IEEE Board of Directors approving the 2015 Patent Policy Updates, opponents of the Updates predicted (on [www.advancingengineering.org](http://www.advancingengineering.org)) that the Updates would “undermine the incentives to invest in R&D and participate in IEEE standardization.” To the contrary, the period since 2015 has seen increasing membership in IEEE-SA’s Corporate Advisory Group and a steady increase in new Project Action Requests (PARs) submitted to initiate standardization projects. Unlike critics of the 2015 Updates, we would not presume to say definitively whether the Updates are or are not responsible for the increasing popularity of the IEEE-SA as a forum to create new standards. What we can say is that, more than six years later, predictions made by opponents of the 2015 Patent Policy Updates that they would cause innovators to flee the IEEE-SA’s standardization activities have been proven wrong.

If any negative effect on innovation could be discerned, the place where one would expect to see it is IEEE 802.11, where the negative LoAs opponents of the 2015 Patent Policy Updates have submitted have been concentrated. Yet the period since the 2015 Updates has seen the launch of a highly innovative new Wi-Fi standard, IEEE 802.11ax (also known as Wi-Fi 6) that contains numerous technical advances and is (not coincidentally) enjoying widespread adoption. The Wi-Fi Alliance predicts that over 3.5 billion Wi-Fi 6 compliant devices will ship in 2022. [www.wi-fi.org/beacon/the-beacon/wi-fi-6-shipments-to-surpass-52-billion-by-2025](http://www.wi-fi.org/beacon/the-beacon/wi-fi-6-shipments-to-surpass-52-billion-by-2025). Despite the unfortunate recent efforts of companies hostile to the success of Wi-Fi (perhaps not coincidentally, many of the same companies that opposed the 2015 Updates) to hinder IEEE 802.11ax’s ratification by ISO/IEC, the standard enjoys widespread support from key industry stakeholders.

More generally, looking at the broader world of collaborative technology development inside and outside formal standards development, more and more fundamental standards development work is
happening in open-source based groups that have gone beyond the effort to define RAND reflected in the 2015 Patent Policy Updates to require royalty-free licensing. In addition, the pervasive adoption of royalty-free standards in areas like cable broadband (DOCSIS), web services (HTML), personal area networking (USB and Bluetooth) and datacenter computing (Kubernetes, Prometheus, Kafka, and other projects) should suggest that the availability of royalty-based patent licensing is hardly necessary for innovation. Given the proliferation of royalty-free standards development beyond IEEE-SA, it is difficult to argue that anything in the 2015 Patent Policy Updates harmed innovation at IEEE-SA. Rather, the scale of innovation happening today in collaborative development efforts governed by IPR policies that go far beyond the 2015 Updates in limiting royalty-based licensing suggests that the IEEE-SA must maintain its future relevance by providing a hospitable forum for open-source standards development using Apache 2.0 and other widely recognized open-source licenses. That work that is far more advanced at IEEE-SA than it is at, for example, ETSI.

We hope the discussion above is helpful to the BoG as it considers whether it should reverse a decision that was taken with super-majority approval by IEEE-SA PatCom, IEEE-SA Standards Board, IEEE-SA BoG, and the IEEE Board of Directors, and thus reward a small number of loud critics who continue to question the benefits of the 2015 Patent Policy Updates to IEEE-SA and to participants in IEEE-SA standards development. As a company that implements numerous IEEE-SA standards in the products we make, we value the increase in transparency and predictability of royalty expenses that the 2015 Patent Policy Updates have brought. We will further address specific benefits of the Updates in more detail in other parts of our response. For now, we will conclude by noting our continued and strong support for the 2015 Patent Policy Updates. They continue to make the IEEE-SA a better place for Cisco to join our industry peers to create innovative standards.

**Cons:**

The only disadvantage that we can see from the BoG's decision to retain the 2015 Patent Policy Updates is that a small group of companies that refuse to reconcile themselves to the Updates will continue to take advantage of the possibility provided in the current Letter or Assurance form to submit LoAs in which they decline to license patents that they own.

Given the likelihood that opponents of the 2015 Patent Policy Updates will continue to use negative LoAs, the BoG should carefully consider whether the Standards Association should initiate discussions to modify the Patent Policy to limit the availability of negative LoAs by adopting common-sense rules changes that would move the IEEE-SA Patent Policy closer to patent policies used in numerous informal standards development organizations. One example would be a prohibition on the use of negative LoAs to refuse to license any Patent Claim that is essential to implement a contribution that the negative declarant makes or causes to be made. The BoG may also consider requiring negative LoAs to be made before a particular point in time in the development of an IEEE-SA standard, so that working group participants have the benefit of knowing early in the standards development process that a particular patentee is planning to refuse to license patent claims it owns.

**Comments regarding the ongoing use of the Custom LOA form under this option:**

We disfavor the continued use of the Custom LOA form for any standard that was the subject of a PAR approved after March 15, 2015.
Option ii(a): Remove all of the Patent Policy provisions regarding Prohibitive Orders

Pros:

None. Cisco does not support removal of the provisions in the current Patent Policy that limit the availability of Prohibitive Orders to patentees claiming to own Essential Patent Claims.
We begin with what we hope is an uncontroversial point: by submitting an LoA to IEEE-SA, unless it selects option 1(d) in the current approved Letter of Assurance form, the declarant is committing that it will make Essential Patent Claims available for license. As was noted by the US Department of Justice in its 2015 Business Review Letter concerning the 2015 Updates,

“a patent holder that makes a RAND commitment agrees that licensing its essential patent claims on reasonable rates and other reasonable terms and conditions is appropriate compensation for their use in implementing the standard. Inherent in such a RAND commitment is a pledge to make licenses available to those who practice such essential patent claims as a result of implementing the standard— in other words, not to exclude these implementers from using the standard unless they refuse to take a RAND license.”


Participants in standards development at IEEE-SA and implementers of IEEE-SA standards rely on the commitment to license in making decisions whether to participate in standards development at IEEE-SA and whether to implement IEEE-SA patents. It would be unwise to implement an IEEE-SA standard if any of the dozens of entities that submit positive LoAs could nevertheless seek to prevent the continued sale of a product that implements an IEEE-SA standard. It would also be unwise to implement an IEEE-SA standard if any of those patentees could seek to coerce the would-be implementer into paying royalties based on the total cost it would avoid by not having to abandon a product (for example, a smartphone, or a complex networking device, or even a motor vehicle) it had spent millions or billions of dollars to develop because it was prevented from selling that product because a court or agency had issued a Prohibitive Order.

These are the principles that explain the limitation on the use of Prohibitive Orders in the 2015 Patent Policy Updates. The participants in the drafting process that supported limiting availability of injunctions well understood that patentees claiming to own Essential Patent Claims had sought to enjoin distribution of products implementing IEEE 802.11 and other IEEE-SA standards. Indeed, during the internal discussions that led to the 2015 Patent Policy Updates, Cisco and other Wi-Fi implementers were litigating a case involving a Patent Assertion Entity called Innovatio that had acquired patents that it claimed were essential to IEEE 802.11. Innovatio contacted end users of Wi-Fi, for example hotels and coffee shops that offered Wi-Fi services, and threatened to sue them and seek an injunction unless they paid several thousand dollars per Wi-Fi access point. Cisco and other Wi-Fi access point vendors intervened in the case, and Innovatio was ultimately awarded less than one tenth of one percent of the amount it sought to extort from Wi-Fi users. In re Innovatio IP Ventures, LLC Patent Litigation, 956 F. Supp. 2d 925 (N. D. Ill. 2013). Earlier, a non-practicing entity had successfully persuaded a US District Court judge to enjoin the implementation of Wi-Fi by the defendant in a patent infringement case. Commonwealth Scientific Industrial and Research Org. v. Buffalo Technology, Inc., 492 F. Supp. 2d 500 (E.D. Tex. 2007).

The Justice Department also recognized that the limitations on Prohibitive Orders contained in the 2015 Patent Policy Updates were consistent with the position that US courts, then and now, were taking as they were called upon to decide cases brought by patentees claiming to own patents they had voluntarily committed to license when they participated in standards development. For that reason, the Justice Department wrote, the limitations contained in the 2015 Patent Policy Updates “will not be significantly more restrictive than current U.S. case law” (2015 Business Review Letter at page 10). As the Justice Department noted, patentees remain entirely free to seek reasonable
Removing the limitations on Prohibitive Orders contained in the 2015 Patent Policy Updates would return IEEE-SA, and implementers of IEEE-SA standards, to a time when they were susceptible to being held up by patentees, often, at least in Cisco’s experience, by companies like Innovatio that had purchased or received patents from participants in IEEE-SA standards development. There is no reason for IEEE-SA to take that drastic step.

Comments regarding the ongoing use of the Custom LOA form under this option:

| The use of negative LoAs to evade the limitations on Prohibitive Orders contained in the 2015 Patent Policy Update is a concern that IEEE-SA should address by limiting the availability of negative LoAs, as discussed in our response to Question (i). |

Option ii(b): Remove all optional factors included in the definition of Reasonable Rate

Pros:

None. Cisco does not support removal of the optional factors set out in the definition of “Reasonable Rate” in Section 6 of the IEEE-SA By-Laws.
Cons:

We first note that the factors identified in the three bullets contained in the definition of “Reasonable Rate” are recommended, not mandatory. The language introducing the bullets says that the determination of what a “Reasonable Rate … should include, but need not be limited to” the points identified in the three bullets. The use of the word “should” implies that this is IEEE-SA’s recommendation, but is not a requirement. While Cisco would have preferred that at least the first two bullets had, in fact, been made mandatory, this was one of a number of places in which proponents of the 2015 Patent Policy Updates compromised with opponents. Another compromise was the inclusion of the last bullet, which permits the use of comparator licenses, subject to some restrictions.

We believe that each of the three bullets should be retained. As to the first bullet, like the limits on the use of injunctions in the text on Prohibitive Orders, discussed in our response to Question ii(a) of this Request for Comments, the limitation of the value of the patented invention to what additional value it contributes to the smallest salable patent-practicing unit is consistent with current US law on patent damages. As the US Court of Appeals for the Federal Circuit, the appeals court primarily responsible for patent cases, wrote in 2014, when damages are awarded for infringement of the claims of a patent, and infringement occurs “in one component of a multi-component product, it is the exception, not the rule, that damages may be based upon the value of the multi-component product.” VirnetX, Inc. v. Cisco Systems, Inc., 767 F.3d 1308, 1326 (Fed. Cir. 2014). In that case, the Federal Circuit not only reaffirmed the default rule that damages be based on the “smallest salable patent-practicing unit” (SSPPU) but also noted that allocation of the SSPPU was appropriate where the SSPPU was itself “a multi-component product containing several non-infringing features with no relation to the patented feature.” Id. at 1327.

It is the nature of product design in technology for more and more functions to be integrated into smaller and smaller products. So a Wi-Fi access point may implement hundreds or thousands of inventions reflected in hundreds or thousands of essential patents. The wisdom of the SSPPU language contained in the first bullet of the optional text in the definition of “Reasonable Rates” is that it focuses the analysis of what royalty is reasonable on the component in the Wi-Fi access point that implements the invention the patentee owns. It thus helps prevent over-rewarding patentees for innovations that they did nothing to create, namely the potentially many, many innovations other than the patentee’s essential patent that may be included in the same device. Innovation should certainly be rewarded, but the effect of awarding damages based on something other than the SSPPU is to unjustly enrich patentees by awarding damages for inventions someone else created. The first bullet strikes a thoughtful balance between rewarding patentees for the innovations they provide and preserving the ability to implement IEEE-SA standards.

Turning to the second bullet, it is intended to address the problem of “royalty stacking”, the phenomenon of multiple patents that are alleged to be infringed by implementation of the same standard or standards, leading to a royalty stack that is inconsistent with implementation of a standard in a product that consumers will be able to afford. The problem of royalty stacking is heightened by the decentralized nature of patent litigation, in which multiple patents describing inventions practiced in the same standard or product may be asserted against an implementer over time, with no coordination between the different patentees and no single authority, such as a judge, keeping track of the multiple damages that the implementer may be required to pay to the different patentees.

In that system, every patentee has an incentive to describe the patent it owns as critically important, when, in truth, not all patents describe fundamental inventions. As different patents claimed to be essential to the same standard are asserted, and implementers enter into multiple RAND licenses, this raises the risk that the result of the individual profit-maximizing decisions each patent licensor
makes will, taken together, result in a “stack” of royalties that is inconsistent with the implementation of an IEEE-SA standard in a product that consumers can afford.

As leading academics have recognized, concerns with royalty stacking reflect nothing more than the application of classic microeconomic theory to royalty-bearing licensing where multiple licensors owning patents essential to the same standard seek to license those patents to the same implementer. See, for example, a chapter co-written by Nobel laureate Jean Tirole and Harvard Business School Professor Joshua Lerner titled “Public Policy Toward Patent Pools” in the National Bureau of Economic Research publication Innovation Policy and the Economy (2008) (available at https://www.nber.org/system/files/chapters/c5304/c5304.pdf). The phrase used in the second bullet in the definition of “Reasonable Rates”, “in light of the value contributed by all Essential Patent Claims”, is a reminder to courts to consider stacking concerns as they award damages to each individual patentee, so that the sum of all royalties the maker of the SSPPU must pay does not come to comprise so large a share of the price of the SSPPU that the implementer finds it economically irrational to continue selling it.

As noted previously, the inclusion of the third bullet reflected a compromise with opponents of the adoption of the 2015 Patent Policy Updates, who sought to permit the unbounded use of comparator licenses, reflecting the resolution of past licensing disputes, even those that reflected the use of Prohibitive Orders like injunctions issued by US or non-US courts or the exclusion of products from the US by the International Trade Commission. Recognizing that courts regularly use the results of past license negotiations as a guidepost for the resolution of new disputes, proponents of the 2015 Patent Policy Updates agreed to the use of comparator licenses, but with the caveat that only comparators where the accused infringer was not coerced into a super-competitive settlement by the threat of a Prohibitive Orders would be valid. This caveat was intended to prevent the de facto resurrection of Prohibitive Orders in contravention of the text in the 2015 Patent Policy Updates limiting their use by permitting them to serve as benchmarks for the resolution of new disputes. The need for that safeguard is just as clear today as it was in 2015.

Comments regarding the ongoing use of the Custom LOA form under this option:

Please see previous responses.

Pros:

Option iii: Offer more options than before by: Allowing an LOA filer the ability to choose whether it may seek or not seek Prohibitive Orders in accordance with the current wording of the Patent Policy; and Clarifying the optionality of the factors included in the definition of Reasonable Rate.

None. Cisco does not support the creation of the options discussed.
Cons:

For the reasons discussed in our responses to Questions i, ii(a) and ii(b), Cisco believes that the current IEEE-SA Patent Policy reaches the right balance between the interests of patent monetizers in securing a fair return on the investment they make and the interests of implementers of IEEE-SA standards in transparent and predictable licensing costs that are consistent with bringing products that implement IEEE-SA standards to the consumers that want them. As to permitting participants to “opt out” of the restrictions on the use Prohibitive Orders, we have already explained why those restrictions offer valuable protections to implementers who might otherwise be subject to exploitation by patentees that use the threat that they will prevent the sale of products as a way to gain bargaining power in licensing negotiations. As to “clarifying the optionality” of the three bullets in the definition of “Reasonable Rates”, that language is understood today to be a suggestion to courts called upon to resolve licensing disputes involving patents claimed to be essential to implement IEEE-SA standards, not a requirement.

As we have pointed out earlier in this response, the “problems” that some have claimed are raised by the 2015 Patent Policy Updates are not inherent to the Updates themselves, but instead reflect the unwillingness of some participants in standards development at IEEE-SA to conform to the decision of the majority, indeed the super-majority, of those involved in the review and approval of the 2015 Patent Policy Updates at multiple levels within IEEE-SA and, ultimately, by the IEEE Board of Directors. In addition to making specious allegations regarding the process that led to the 2015 Patent Policy Updates (allegations that were conclusively rejected by the Justice Department in the 2015 Business Review Letter, though that has not stopped opponents of the 2015 Updates from continuing to pose baseless charges that the process was unfair), those companies have expressed their continued opposition by filing negative LoAs, availing themselves of an option that is provided under the current Patent Policy. Given that option, today they have no need for additional “opt-outs”, and providing such opt-outs would move IEEE-SA further from the goals of transparent and predictable patent licensing outcomes that motivated the proponents of the 2015 Patent Policy Updates. Indeed, as noted in the response to Request (i), it is time for IEEE-SA to consider whether to continue to make available the “negative LoA” option in the form in which it exists today.

Comments regarding the ongoing use of the Custom LOA form under this option:

We have no further comments. We thank the BoG for its interest in Cisco’s views. We would, of course, welcome the opportunity to discuss any questions BoG members have regarding any of our comments.
Option i: No change to the text of the 2015 Patent Policy

Pros:
Verizon supports the continued use of the existing language of the 2015 patent policy regarding Prohibitive Orders and Reasonable Rates. IEEE’s policy in this regard provides a reasonable balance of the interests of rights holders, implementers and users of IEEE standardized technology, and provides additional clarity for negotiations between parties.

Cons:
None

Comments regarding the ongoing use of the Custom LOA form under this option:

Option ii(a): Remove all of the Patent Policy provisions regarding Prohibitive Orders

Pros:
None

Cons:
Verizon does not support removing the Policy provisions regarding Prohibitive Orders. Prohibitive Orders undermine the proper balance of the FRAND licensing system.

Comments regarding the ongoing use of the Custom LOA form under this option:

Option ii(b): Remove all optional factors included in the definition of Reasonable Rate

Pros:
None
Cons:

Verizon does not support removing the Policy provisions regarding Reasonable Rates.

Comments regarding the ongoing use of the Custom LOA form under this option:

Option iii: Offer more options than before by: Allowing an LOA filer the ability to choose whether it may seek or not seek Prohibitive Orders in accordance with the current wording of the Patent Policy; and Clarifying the optionality of the factors included in the definition of Reasonable Rate.

Pros:

none

Cons:

Verizon does not support offering the options identified. Providing the rights holder the option of whether it will comply with the Prohibitive Orders provision at a minimum adds complication and confusion to the disclosure process, and could be used to effectively avoid the benefits of the provision. Making it more clear that the Reasonable Rate factors are optional seems duplicative at best and likely to increase confusion rather than clarity.

Comments regarding the ongoing use of the Custom LOA form under this option:
Option i: No change to the text of the 2015 Patent Policy

Pros:

Maintaining the terms of the IEEE Patent Policy is fundamental to the success of IEEE standards, the promotion of innovation around IEEE technologies, and the protection of competition and fair-play involving IEEE implementations.

The Fair Standards Alliance (FSA) is a broad and inclusive association of mainstream stakeholders that promotes the licensing of standard essential patents (SEPs) on a fair, reasonable, and non-discriminatory (FRAND) basis. Like IEEE membership, our membership is diverse, ranging from large multinationals to many small and medium-sized businesses, and coming from different levels of the value chain across a diversity of industry sectors. Our members significantly contribute to innovation worldwide. Annually, the aggregate turnover of FSA members is more than $2.5 trillion, and in aggregate our members spend more than $160 billion on R&D and innovation. FSA members have more than 500,000 patents, including SEPs, that are either granted or pending. A list of the approximately fifty FSA members can be found at https://fair-standards.org/members/.

Many of our members were present when the US Department of Justice challenged the IEEE to take up the effort to clarify its patent policy, and to improve predictability for IEEE members and the marketplace at large. Renata Hesse, Deputy Ass’t Att’y Gen., Antitrust Div., U.S. Dep’t of Justice, Six “Small Proposals for SSOs Before Lunch, https://www.justice.gov/atr/file/518951/download. The IEEE’s effort has paid off, with IEEE standards far less likely to be subject to disputes than other standards, such as cellular, where litigation and unfair practices have run rampant. https://www.law360.com/articles/1392222/how-standard-setting-orgs-can-curb-patent-litigation. IEEE’s efforts the Patent Policy to fairly balance all parties’ interests, and to clearly delineate basic requirements, has offered the predictability needed by innovators to invest in and around IEEE standards.

It has been documented, such as by the famous studies from IPLytics, that IEEE and IEEE standards have thrived under the Patent Policy, and that efforts by a small handful of special interests to demean IEEE are without merit. IEEE’s own publicly accessible data shows that total new work (new PARs + PARs for revision of existing standards) increased from 183 items in 2016 to 244 in 2020. Furthermore, new PARs, which are subject to the provisions of the 2015 patent policy increased from 100 to 178, a 78% increase, during the same five-year time frame. Since the adoption of the 2015 patent policy, contributors have chosen to initiate within IEEE, new standardization work in diverse areas at the forefront of innovation including connectivity of personal health devices, blockchain, robotics and autonomous systems, among others. The successful history of the IEEE Patent Policy over the last 6 years, demonstrates the appeal that IEEE holds for people looking to develop standards for cutting technologies, many of which will shape the future economy, and the widespread support that IEEE has received from mainstream stakeholders. The only correct conclusion is that Patent Policy has been an outstanding success and benefit to IEEE’s standardization work and its Mission “to foster technological innovation and excellence for the benefit of humanity.”
The Patent Policy also accords well with applicable law. For SSOs, like IEEE, that have a global reach, it is important to appreciate that different legal regimes can support different approaches. The Patent Policy provides a common reference point for global application of the Patent Policy, in line with mainstream approaches and default legal rules. For example, the Patent Policy’s approach to Reasonable Rates safeguards “appropriate compensation to the patent holder for the practice of an Essential Patent Claim excluding the value, if any, resulting from the inclusion of that Essential Patent Claim’s technology in the IEEE Standard.” This mirrors, for example, US legal requirements that “[w]hen dealing with SEPs … the patentee’s royalty must be premised on the value of the patented feature, not any value added by the standard’s adoption of the patented technology.” Ericsson, Inc. v. D-Link Sys., Inc., 773 F.3d 1201, 1231-32 (Fed. Cir. 2014). It likewise accords with European legal requirements that “Licensing terms have to bear a clear relationship to the economic value of the patented technology. That value primarily needs to focus on the technology itself and in principle should not include any element resulting from the decision to include the technology in the standard.” Communication of the Commission: Setting out the EU approach to Standard Essential Patents COM (2017) 712 final, 29 November 2017, sec. 2.1.

By establishing clear rules for assessment of Reasonable Rates, consistent with mainstream legal approaches, the Patent Policy facilitates negotiations on a worldwide basis to promote licensing and adoption of IEEE standards.

Likewise as to Prohibitive Orders, where applicable law restricts injunctions where monetary relief is sufficient. In the United States, the Federal Circuit has confirmed that “a patentee subject to FRAND commitments may have difficulty establishing irreparable harm” such that an injunction often will be unavailable. Apple Inc. v. Motorola, Inc., 757 F.3d 1286, 1331-32 (Fed. Cir. 2014) (RAND commitment may make it difficult for plaintiff to establish eBay factors such as irreparable harm). But rules internationally can differ significantly. It only makes sense that IEEE seek to encourage a common worldwide approach to Prohibitive Orders involving IEEE-declared SEPs and standards. Such an approach improves market uptake, use and clarity around IEEE standards.

Finally, we note that the US Department of Justice (DOJ) recently set forth its approach to SSO patent policies, and on the IEEE Patent Policy in particular, a marked contrast to the approach taken under the prior DOJ administration. Jeffrey Wilder, Economics Director of Enforcement, Antitrust Div., U.S. Dep’t of Justice, Leveling the Playing Field in the Standards Ecosystem: Principles for a Balanced Antitrust Enforcement Approach to Standards-Essential Patents, Remarks at the IAM and GCR Connect SEP Summit (Sept. 30, 2021) https://www.justice.gov/opa/speech/antitrust-division-economics-director-enforcement-jeffrey-wilder-iam-and-gcr-connect-sep. DOJ’s current approach is a return to the traditional SEP policies that have guided US law for decades, as expressed in its 2015 Business Review Letter to IEEE. In this speech, DOJ announced, among other things, that going-forward it "will support (and not discourage) SDOs in their efforts to adopt IPR policies that address licensing inefficiencies and enable the dissemination of standardized products to consumers.” Id. at 5.

And addressing the IEEE even more expressly, DOJ noted, “When IEEE further defined participants’ licensing obligations in 2015, the [DOJ] concluded that revisions to IEEE’s patent policy had ‘the potential to benefit competition and consumers by facilitating licensing negotiations, mitigating hold up and royalty stacking, and promoting competition among technologies for inclusion in standards.’ We understand that the [DOJ’s]2020 supplemental competition advocacy letter to IEEE questioning the merits of the 2015 business review may have shaken confidence in the business-review process and deterred efforts by SDOs to promote best practices. That is why [DOJ]acted this past April and removed the 2020 supplemental competition advocacy from IEEE’s 2015 review file.” Id. at 11. In short, DOJ confirmed that the 2015 business review letter regarding the Patent Policy, including its conclusions about the benefits of the Patent Policy, remained the applicable and official DOJ
guidance regarding the Patent Policy. In view of DOJ’s regarding IEEE’s patent policy in particular and SDO’s IP policies in general, there are no longer any competition or competition-related reasons to consider changes to the Patent Policy.

Cons:

There are no cons to maintaining the IEEE Patent Policy. It may be, perhaps, that a few vocal special interests will continue voice their concerns. But IEEE should not react to these tactics when the benefits to the mainstream IEEE community from the current Patent Policy are so significant.

Comments regarding the ongoing use of the Custom LOA form under this option:

For standards projects initiated prior to the effective date of the Patent Policy, the custom LOA form should be permitted so that parties may make a declaration pursuant to the text of the IEEE policies that were in effect at the time the project was initiated. But for projects initiated after adoption of the Patent Policy, the custom LOA form should not be permitted.

Option ii(a): Remove all of the Patent Policy provisions regarding Prohibitive Orders

Pros:

FSA does not believe there would be any benefits from removing the Patent Policy’s text addressing Prohibitive Orders.

Cons:

As addressed in the response to Option 1, Prohibitive Orders targeting IEEE standards seriously damages IEEE standards implementers businesses. They restrict promulgation of IEEE standards. They dis-incentivize adoption of IEEE standards, and restrict investment in products and technologies using IEEE standards. The Patent Policy correctly recognizes that where RAND compensation is available, the SEP owner has no reason to pursue injunctions other than to gain leverage over a potential licensee to force acceptance of a license on non-RAND terms. The IEEE was correct to clarify and reinforce this point by including express text limiting the use of injunctions, and should not risk the harm to IEEE and to those who rely on IEEE standards, including consumers, that would accompany the use of injunctions to coerce potential licensees.

Comments regarding the ongoing use of the Custom LOA form under this option:

For standards projects initiated prior to the effective date of the Patent Policy, the custom LOA form should be permitted so that parties may make a declaration pursuant to the text of the IEEE policies that were in effect at the time the project was initiated. But for projects initiated after adoption of the Patent Policy, the custom LOA form should not be permitted.
Option ii(b): Remove all optional factors included in the definition of Reasonable Rate

Pros:

FSA does not believe there would be any benefits from removing the optional factors in the definition of Reasonable Rate.

Cons:

As addressed in the response to Option 1., IEEE standards are implemented worldwide, and so are subject to various (and varying) rules regarding royalties. The IEEE was right to include express text in the Patent Policy to facilitate a common application of the Patent Policy, and to provide better clarity to market participants. Efforts to undermine that clarity by removing portions of the IEEE’s text would harm investment incentives and the ability of small and large companies to reliably invest in research and development to bring new and useful products to market. The IEEE’s approach also is entirely fair; it accords with established legal precedent and ensures that Reasonable Rates are assessed in a manner that provides full RAND compensation to the SEP owner without additional compensation beyond the value of the relevant patents.

Comments regarding the ongoing use of the Custom LOA form under this option:

For standards projects initiated prior to the effective date of the Patent Policy, the custom LOA form should be permitted so that parties may make a declaration pursuant to the text of the IEEE policies that were in effect at the time the project was initiated. But for projects initiated after adoption of the Patent Policy, the custom LOA form should not be permitted.

Option iii: Offer more options than before by: Allowing an LOA filer the ability to choose whether it may seek or not seek Prohibitive Orders in accordance with the current wording of the Patent Policy; and Clarifying the optionality of the factors included in the definition of Reasonable Rate.

Pros:

There would be no benefits to these approaches.
Cons:

For the reasons addressed in response to Option 2(a), IEEE should not make it “optional” to seek Prohibitive Orders targeting IEEE standards. Prohibitive Orders put implementers of IEEE standards seriously damages implementers businesses. They restrict promulgation of IEEE standards. They dis-incentivize adoption of IEEE standards, and restrict investment in products and technologies using IEEE standards. The Patent Policy correctly recognizes that where RAND compensation is available, the SEP owner has no reason to pursue injunctions other than to harass and coerce a potential license into accepting a license on non-RAND terms. The IEEE was correct to include express text limiting the use of injunctions, and should not risk the harm to IEEE and to those who rely on IEEE standards, including consumers, that would accompany the use of injunctions to coerce potential licensees.

As to question 3(ii), FSA does not see that there is any need to clarify the optionality of the factors included in the definition of Reasonable Rate, as such optionality already is clearly stated in the Patent Policy, as well as in the IEEE’s FAQs. FSA would be concerned that any effort to provide further text or revisions on this issue would create more confusion, rather than resolve any significant issues.

Comments regarding the ongoing use of the Custom LOA form under this option:

For standards projects initiated prior to the effective date of the Patent Policy, the custom LOA form should be permitted so that parties may make a declaration pursuant to the text of the IEEE policies that were in effect at the time the project was initiated. But for projects initiated after adoption of the Patent Policy, the custom LOA form should not be permitted.
Option i: No change to the text of the 2015 Patent Policy

Pros:

None, although we given to understand that the majority of the implementers/Licensees are very happy with the 2015 Patent Policy as it is.
Cons:

As already identified and warned in the December 2014 and February 2015 Orange Letters to IEEE-SA, the changes introduced in the previous version of the Patent Policy had foreseeable and have had side-effects which materially affected Orange (and probably other SEP Holders) all these years. These adverse side-effects are:

(1) these changes directly affect the rights of the Patent Holders (hence offset the previous balance between a Patent Holder and a prospective licensee) WITHOUT enhanced certainty to conclude a license: Orange submits that it already experiences the real negative impacts in current licensing negotiations (...); and

(2) it is really unclear whether current Patent Holders members will be able to submit declarations for their own potentially Essential Patents under the new Letter of Assurance (LoA), IPR Policy and FAQ.

The extraordinary high number of Negative LOAs which ensued is evidence of the sustained opposition voiced by materially affected stakeholders which remained unaddressed. It became such a problem that PATCOM introduced a Custom LOA in 2019 - 4 years after the facts! - to ease the conditions under which Positive LOAs could be submitted/accepted, but no change was made to the Patent Policy.

Another evidence of the size of the issue at stake is the extraordinary large number of FAQ needed to support the Patent Policy, instead of clarifying the Patent Policy.

In conclusion, despite the efforts spent by all stakeholders, the 2015 Patent Policy failed to provide further transparency or clarity to the terms and conditions under which a Declarant is prepared to grant a license under its SEP and it failed to secure the necessary Positive LOAs as was done under the previous Patent Policies. Orange remains in favor of reverting to the Patent Policy before 2015. By introducing specific options (but not allowing Declarants to commit to any of these options), the 2015 Patent Policy created promises/expectations (for the potential licensees or the market) without ensuring that each Patent Holder would adhere to them: this exacerbated the tension and disputes between (some) Patent Holders and (some or many) potential licensees instead of facilitating SEP licensing in good faith. Even worse, some received Negative LOAs did not become Accepted LOAs and hence were never published by IEEE-SA: the process by which a Negative LOA is Accepted – and specially when it is not - needs to be transparent, documented and predictable.
Comments regarding the ongoing use of the Custom LOA form under this option:

The Custom LOA was a necessary step forward to accommodate receiving Positive LOAs for projects launched before the Patent Policy (2015). Alone, it does not resolve the issues at stake, which should be addressed by adapting the current Patent Policy.

In particular, we propose that IEEE-SA and its PATCOM consider that the changes adopted in the 2015 Patent Policy be re-introduced as additional and optional features to the previous IPR Policy: this would enable each Declarant to select clearly under which specific definition, terms and conditions it is prepared to negotiate a license for its SEP to a particular standard. Providing this feature would enhance transparency of LOAs (and permit to report their contents more realistically) and avoid contradictory beliefs/expectations on the basis of Positive or Negative LOAs. Indeed, submitting a Negative LOA is the only option available today to Declarants who cannot agree that the whole package of ambiguous terms and conditions embedded in the current LOA, IPR Policy and FAQ actually matches with their RAND licensing offer for their SEPs to a particular standard.

Under this Option i, a new LOA Form should be developed as explained under the Cons above.

Option ii(a): Remove all of the Patent Policy provisions regarding Prohibitive Orders

Pros:

The situation on Prohibitive Orders has changed since its introduction in the 2015 Patent Policy, due to subsequent justice decisions in the world. It is unsure whether this provision should be kept in an SDO Patent Policy, because a Prohibitive Order is to be decided by a Judge/Arbitrator anyway, by taking into account the circumstances specific to each case and to the behavior of both parties in dispute. There is no reason and no role for IEEE-SA to take side a priori in any commercial dispute about patent rights, potential essentiality or infringement.

This Option ii(a) should be considered in combination with Option ii(b). Orange remains in favor of reverting to the Patent Policy before 2015.

Alternatively, we propose that IEEE-SA and its PATCOM consider that the changes adopted in the 2015 Patent Policy be re-introduced as additional and optional features to the previous IPR Policy: this would enable each Declarant to select clearly under which specific definition, terms and conditions it is prepared to negotiate a license for its SEP to a particular standard. Providing this feature would enhance transparency of LOAs (and permit to report their contents more realistically) and avoid contradictory beliefs/expectations on the basis of Positive or Negative LOAs. Indeed, submitting a Negative LOA is the only option available today to Declarants who cannot agree that the whole package of ambiguous terms and conditions embedded in the current LOA, IPR Policy and FAQ actually matches with their RAND licensing offer for their SEPs to a particular standard.

Cons:

None. Maybe material to be kept for information in a FAQ?
Comments regarding the ongoing use of the Custom LOA form under this option:

Under this Option ii(a), a new LOA Form should be developed. In particular, we propose that IEEE-SA and its PATCOM consider that the changes adopted in the 2015 Patent Policy be re-introduced as additional and optional features to the previous IPR Policy: this would enable each Declarant to select clearly under which specific definition, terms and conditions it is prepared to negotiate a license for its SEP to a particular standard. Providing this feature would enhance transparency of LOAs (and permit to report their contents more realistically) and avoid contradictory beliefs/expectations on the basis of Positive or Negative LOAs. Indeed, submitting a Negative LOA is the only option available today to Declarants who cannot agree that the whole package of ambiguous terms and conditions embedded in the current LOA, IPR Policy and FAQ actually matches with their RAND licensing offer for their SEPs to a particular standard.

Orange would prefer to work with a single LOA Form under a Patent Policy that should fit both past and new projects.

Option ii(b): Remove all optional factors included in the definition of Reasonable Rate

Pros:

This Option ii(b) should be considered in combination with Option ii(a). The removal should extend to all elements in the definition of Reasonable Rate that were not present before the 2015 Patent Policy. Indeed, Orange remains in favor of reverting to the Patent Policy before 2015.

Alternatively, we propose that IEEE-SA and its PATCOM consider that the changes adopted in the 2015 Patent Policy be re-introduced as additional and optional features to the previous IPR Policy: this would enable each Declarant to select clearly under which specific definition, terms and conditions it is prepared to negotiate a license for its SEP to a particular standard. Providing this feature would enhance transparency of LOAs (and permit to report their contents more realistically) and avoid contradictory beliefs/expectations on the basis of Positive or Negative LOAs. Indeed, submitting a Negative LOA is the only option available today to Declarants who cannot agree that the whole package of ambiguous terms and conditions embedded in the current LOA, IPR Policy and FAQ actually matches with their RAND licensing offer for their SEPs to a particular standard.

Cons:

The removal should extend to all elements in the definition of Reasonable Rate that were not present before the 2015 Patent Policy (i.e. removal of 3 bullet-point listed factors is insufficient). Indeed, Orange remains in favor of reverting to the Patent Policy before 2015.

Maybe material to be kept for information in a FAQ, or for a separate licensing commitment to be recorded in a new LOA Form as proposed under the Pros?
Comments regarding the ongoing use of the Custom LOA form under this option:

Under this Option ii(b), a new LOA Form should be developed. In particular, we propose that IEEE-SA and its PATCOM consider that the changes adopted in the 2015 Patent Policy be re-introduced as additional and optional features to the previous IPR Policy: this would enable each Declarant to select clearly under which specific definition, terms and conditions it is prepared to negotiate a license for its SEP to a particular standard. Providing this feature would enhance transparency of LOAs (and permit to report their contents more realistically) and avoid contradictory beliefs/expectations on the basis of Positive or Negative LOAs. Indeed, submitting a Negative LOA is the only option available today to Declarants who cannot agree that the whole package of ambiguous terms and conditions embedded in the current LOA, IPR Policy and FAQ actually matches with their RAND licensing offer for their SEPs to a particular standard.

Orange would prefer to work with a single LOA Form under a Patent Policy that should fit both past and new projects.

Option iii: Offer more options than before by: Allowing an LOA filer the ability to choose whether it may seek or not seek Prohibitive Orders in accordance with the current wording of the Patent Policy; and Clarifying the optionality of the factors included in the definition of Reasonable Rate.

Pros:

The suggestions to offer more options than before under this Option iii are more limited than the proposal we make under the Cons below: so, even though it may seem to be attractive and a step towards a more balanced framework, it is not phrased in a balanced way and should be subject to further study/discussion.

Cons:

Alternatively, we propose that IEEE-SA and its PATCOM consider that the changes adopted in the 2015 Patent Policy be re-introduced as additional and optional features to the previous IPR Policy: this would enable each Declarant to select clearly under which specific definition, terms and conditions it is prepared to negotiate a license for its SEP to a particular standard. Providing this feature would enhance transparency of LOAs (and permit to report their contents more realistically) and avoid contradictory beliefs/expectations on the basis of Positive or Negative LOAs. Indeed, submitting a Negative LOA is the only option available today to Declarants who cannot agree that the whole package of ambiguous terms and conditions embedded in the current LOA, IPR Policy and FAQ actually matches with their RAND licensing offer for their SEPs to a particular standard.
Under this Option iii, a new LOA Form should be developed. In particular, we propose that IEEE-SA and its PATCOM consider that the changes adopted in the 2015 Patent Policy be re-introduced as additional and optional features to the previous IPR Policy: this would enable each Declarant to select clearly under which specific definition, terms and conditions it is prepared to negotiate a license for its SEP to a particular standard. Providing this feature would enhance transparency of LOAs (and permit to report their contents more realistically) and avoid contradictory beliefs/expectations on the basis of Positive or Negative LOAs. Indeed, submitting a Negative LOA is the only option available today to Declarants who cannot agree that the whole package of ambiguous terms and conditions embedded in the current LOA, IPR Policy and FAQ actually matches with their RAND licensing offer for their SEPs to a particular standard.

Orange would prefer to work with a single LOA Form under a Patent Policy that should fit both past and new projects.

Comments regarding the ongoing use of the Custom LOA form under this option:
Option i: No change to the text of the 2015 Patent Policy

Pros:

The IEEE Patent Policy helps to support the success of IEEE’s standards. It provides clarity in the marketplace, reduces disputes, and preserves and protects the benefits of competition. It fairly balances the interests of SEP holders and users of IEEE standards. IEEE’s standard setting activities have thrived under the current policy, which has been in effect for many years. Revising the policy, as proposed below, however, would increase opportunities for opportunistic conduct by SEP holders.

HP Inc. (“HP”) is among the world’s largest suppliers of personal computers, printers (both thermal inkjet and laser-based) and 3D printing solutions. HP is an Advanced Corporate Member of the IEEE-SA, Tier 4 and individual membership with 802.11. IEEE 802.11 wireless solutions ship in all of HP’s PC products and most of HP’s printers. 802.11 (Wi-Fi) is becoming the predominant connectivity mechanism for printers. HP is involved with 802.11bf (WLAN sensing), 802.11bh (Randomized Mac Address – RCM), 802.11bi (Enhanced Data Privacy Protection – EDP), IEEE 802.11be (EHT), 802.11az (NG positioning), 802.11ba (WUR), 802.11bd (NGV), 802.11bb (Light Com), 802.11bc (Broadcast services) and 802.11me (core spec. maintenance. HP is also involved with IEEE 1680.1, IEEE 1680.2, and IEEE 1680.3.

HP has been both an SEP licensor and licensee, though in net terms is predominantly a licensee. HP seeks where possible to buy licensed components; however, that has become particularly difficult when sourcing communications/networking chips or hardware/software providing audio-video coding/decoding (codec) functionality. Nonetheless, HP offers indemnity on all its standard products.

Cons:

There are no cons to maintaining the IEEE Patent Policy.

Comments regarding the ongoing use of the Custom LOA form under this option:

For standards projects initiated prior to the effective date of the Patent Policy, the custom LOA form should be permitted so that parties may make a declaration pursuant to the text of the IEEE policies that were in effect at the time the project was initiated. But for projects initiated after adoption of the Patent Policy, the custom LOA form should not be permitted.
Option ii(a): Remove all of the Patent Policy provisions regarding Prohibitive Orders

Pros:
There are no benefits to removing the Patent Policy’s express limitations on prohibitive orders.

Cons:
The use of injunctions or similar prohibitive orders against IEEE standards would be bad for IEEE, for IEEE participants, and for consumers. Unless the SEP holder is unable to obtain RAND compensation via other means, such as court adjudication, SEP prohibitive orders are tools of hold up, which interfere with the use and promulgation of IEEE standards. The IEEE Patent Policy correctly balances the interest of SEP holders that seek reasonable compensation with the interests of users of IEEE standards to not be subject to abusive demands and tactics. If IEEE standards become subject to prohibitive orders, companies may choose to avoid IEEE standards in favor of other alternative technologies.

HP operates in very competitive markets, with large volumes and comparatively small profit margins, with respect to complex products that integrate many diverse technologies. Injunctions or exclusion orders against multiple product lines using a common standards-based technology, such as 802.11, would have a disproportionately negative impact for HP as compared to the multiple other unrelated technologies present in those products.

Standards having FRAND requirements more lax than IEEE’s current one allow for the imposition of inflated royalty rates by many licensors. As HP has experienced with certain codecs standards, for example, many prospective licensees will delay or reduce adoption, anticipating the failure of the standard, in favor of either older standards (where the relevant SEPs may have already expired but the technology is still suitable) or alternative standards having substantially clearer licensing commitments (such as RANDz and the current IEEE IP policy).

Comments regarding the ongoing use of the Custom LOA form under this option:
For standards projects initiated prior to the effective date of the Patent Policy, the custom LOA form should be permitted so that parties may make a declaration pursuant to the text of the IEEE policies that were in effect at the time the project was initiated. But for projects initiated after adoption of the Patent Policy, the custom LOA form should not be permitted.

Option ii(b): Remove all optional factors included in the definition of Reasonable Rate

Pros:
There would be no benefit to removing the optional factors in the definition of Reasonable Rate.
Cons:

Increasing uncertainty around SEP licensing terms would inhibit negotiations, increase disputes, create the potential for abuse, and undermine adoption of IEEE standards. The Patent Policy properly balances the interest of SEP owners that seek reasonable compensation with the interests of users of IEEE standards to not be subject to abusive demands.

Comments regarding the ongoing use of the Custom LOA form under this option:

For standards projects initiated prior to the effective date of the Patent Policy, the custom LOA form should be permitted so that parties may make a declaration pursuant to the text of the IEEE policies that were in effect at the time the project was initiated. But for projects initiated after adoption of the Patent Policy, the custom LOA form should not be permitted.

Option iii: Offer more options than before by: Allowing an LOA filer the ability to choose whether it may seek or not seek Prohibitive Orders in accordance with the current wording of the Patent Policy; and Clarifying the optionality of the factors included in the definition of Reasonable Rate.

Pros:

There would be no benefits to these approaches.

Cons:

As to 3(i), IEEE should not create approaches supporting injunctive relief against IEEE standards. The complexity of having to deal with multiple licensors with differing stances towards licensing would lead to greater confusion and difficulty in negotiations. The IEEE Patent Policy already provides for the use of prohibitive orders where compensation is not available via less drastic means (e.g., via royalty adjudication). The IEEE Patent Policy correctly balances the interest of SEP holders that seek reasonable compensation with the interests of users of IEEE standards to not be subject to abusive demands and tactics. Option 3(i) would cause confusion and negatively impact IEEE standards.

As to 3(ii), the optionality of the factors in the Patent Policy already is well addressed in the policy, and also in the IEEE’s FAQs. Further efforts to modify the text are thus unnecessary and may cause confusion.

Comments regarding the ongoing use of the Custom LOA form under this option:

For standards projects initiated prior to the effective date of the Patent Policy, the custom LOA form should be permitted so that parties may make a declaration pursuant to the text of the IEEE policies that were in effect at the time the project was initiated. But for projects initiated after adoption of the Patent Policy, the custom LOA form should not be permitted.
Option i: No change to the text of the 2015 Patent Policy

**Pros:**

None

**Cons:**

The 2015 Patent Policy was adopted through a very closed and exclusive process. It does not reflect the consensus of the IEEE SA membership and continues to be very divisive.

Since the adoption of the 2015 Patent Policy there is a marked increase in filings of negative Letters of Assurance which negatively impacts IEEE standards development.

The increase in filing of negative Letters of Assurance will eventually lead to a denial of accreditation of IEEE standards as American National Standards by the American National Standards Institute (ANSI). It will also negatively impact the international approval of IEEE standards.

The changes inserted into the 2015 Patent Policy, particularly the definition of ‘Reasonable Rate’ to include, among many other aspects and with an optional intent, component level valuation of patent claims, as well as restrictions on access to Prohibitive Orders, were ill-advised. They have been noted to have largely devalued patents and decreased/discouraged the participation to the standardization process and chilled innovation. There have been cases also of reduced access to the standardization process.

The amendment to the 2015 Patent Policy to include a definition of ‘Applicant’ has been used to argue that the IEEE Patent Policy endorses chip-level licensing, a position which would be inconsistent with the US law and policy on the issue.
Comments regarding the ongoing use of the Custom LoA form under this option:

Any increased use of the Custom LoA should not be taken as a working compromise, but as an indication of the rejection of the 2015 Patent Policy.

The adoption of the Custom LoA has not reduced the increasing incidence of negative Letters of Assurance filed in relation to the 2015 Patent Policy. There are indeed cases of submitters filing both a positive custom LoA in support of the pre-2015 Patent Policy and a negative Letter of Assurance in relation to the 2015 Patent Policy.

An increase in the use of the Custom LoA is also an indication of the desire to return to the pre-2015 Patent Policy which gave negotiating parties the flexibility to craft licenses that guaranteed access to the standard and at the same time rewarded innovators.

Option ii(a): Remove all of the Patent Policy provisions regarding Prohibitive Orders

Pros:

The US Supreme Court’s decision in e-Bay v Mercexchange already provides guidance in relation to the grant of Prohibitive Orders for Standard Essential Patents (SEPs). It is therefore unnecessary and counterproductive to have a restriction on access to Prohibitive Orders in the IEEE Patent Policy.

The provisions relating to restricted access to Prohibitive Orders are one of the key controversial amendments added to the 2015 Patent Policy. The removal of these provisions can therefore be expected to have a positive impact on the acceptance of the IEEE Patent Policy and the participation in the standards development.

The DoJ notes that seeking a Prohibitive Order is an exclusive right conferred by the US Constitution. This right promotes dynamic competition by ensuring strong incentives to invest in new technologies.

Prohibitive Orders remain the most important bargaining tool that a patent holder has in relation to FRAND negotiations. Taking away the right to obtain Prohibitive Orders substantially reduces the incentive for technology implementers to engage in good faith negotiations.

Maintaining restrictions to the use of Prohibitive Orders may negatively impact the participation to the standard development process, in particular for actors that cannot cross-subsidize their investments in innovation by other revenues streams and rely fully on the revenues generated via the licensing of IP.

Cons:

The removal of all the patent policy provisions regarding prohibitive orders would be a positive development, but still insufficient on its own to restore the trust lost in the 2015 IEEE Patent Policy.
Comments regarding the ongoing use of the Custom LOA form under this option:

| See option 1 comments on the use of the Custom LoA |

Option ii(b): Remove all optional factors included in the definition of Reasonable Rate

**Pros:**
- The pre-2015 IEEE Patent Policy already contained an option for submitters to voluntarily disclose their terms.
- The silence of the pre-2015 Patent Policy on a definition of reasonable rate allowed negotiating parties to craft licensing terms that suit both their needs and that reflect the commercial realities of the sector.
- The definition of a reasonable rate and the inclusion of the optional factors unfortunately reflects a particular policy bias.
- The DoJ notes that there is no single correct way to calculate a reasonable royalty in the FRAND context and parties should be given flexibility to fashion licenses that reward and encourage innovation.

**Cons:**
- The removal of all optional factors included in the definition of Reasonable Rate would be a positive development, but still insufficient on its own to restore the trust lost in the 2015 IEEE Patent Policy.

Comments regarding the ongoing use of the Custom LOA form under this option:

| See option 1 comments on the use of the Custom LoA |

Option iii: Offer more options than before by: Allowing an LOA filer the ability to choose whether it may seek or not seek Prohibitive Orders in accordance with the current wording of the Patent Policy; and Clarifying the optionality of the factors included in the definition of Reasonable Rate.

**Pros:**
- None, but it could be considered a fallback position, with the preference being a full return to the pre-2015 Patent Policy and a withdrawal of the 2015 Patent Policy

**Cons:**
- As noted in our response to option 2(b), the pre-2015 IEEE Patent Policy already contained an option for submitters to voluntarily disclose their terms, without reflecting a particular bias. Offering more options does not take away from the bias, both real and perceived, reflected in those options.
Comments regarding the ongoing use of the Custom LOA form under this option:

See option 1 comments on the use of the Custom LoA
Option i: No change to the text of the 2015 Patent Policy

Pros:

There are really no justifiable pros to using a policy that has proven detrimental to the industry and IEEE-SA itself (see below and answers in ii(a), ii(b) and iii).

Cons:

The 15 March 2015 patent policy has generated confusion and uncertainty, and has caused several contributors of essential technologies to submit negative LoAs. As a technology enthusiast, a senior IEEE member for decades, and an employee of a company that invests billions in R&D, I am deeply concerned about the impact the referenced negative LOAs have had on the industry. The implementation of an IEEE standard into a product now carries significant risks that such product could be held from the market or banned. Several IEEE 802.11 amendments have not been accepted by ANSI as American National Standards because of the presence of negative LOAs. The reputation of IEEE as a whole and its impact on society are at stake.

An attempt to justify the new policy by IEEE-SA leadership has relied on the number of Project Authorization Requests (PARs). Unfortunately, counting overall PARs does not provide the full picture. Several PARs, especially in new areas of focus for IEEE like ethics, are not impacted by the patent policy. A better metric should look at PARs in those working groups that are heavily impacted by the patent policy because technology is developed by several cutting-edge participants and protected by IP. Such granular PAR analysis, for example like the one performed by the authors here https://wwws.law.northwestern.edu/research-faculty/cbe/events/roundtable/documents/effraimidis_gupta.pdf, shows a very different scenario, where PARs in high-tech working groups such as 802.11 are stagnating or decreasing. Several other metrics (I mentioned negative LoAs already, but time to market is another notable one) paint a gloomy picture for IEEE-SA. Lastly, and notably for IEEE’s sustainability, legal costs have ballooned since the 15 March 2015 patent policy was enacted.

Therefore, I do not support option i.

Comments regarding the ongoing use of the Custom LOA form under this option:

The need for a custom LoA, and de facto the coexistence of two patent policies, highlights – and is one notable dubious patch to – the complexities introduced by the 15 March 2015 patent policy.
Option ii(a): Remove all of the Patent Policy provisions regarding Prohibitive Orders

Pros:

| While the cleanest and simplest solution to the challenges identified under Option i would be to roll back the policy to the 14 March 2015 policy, option ii(a) coupled with option ii(b) would remove two very significant hurdles, and restore some balance and some needed clarity. I believe this option, together with option ii(b), will be an important step towards reinstating some of IEEE-SA’s credibility and efficiency. |
| Therefore, absent an option to roll back the policy to the 14 March 2015, I support option ii(a). |

Cons:

| The only downside of this option is that it is unfortunately limited in scope. A full roll back to the 14 March 2015 patent policy would have not only addressed ii(a), but also removed additional challenges and complexities, including the need for a custom LoA. |

Comments regarding the ongoing use of the Custom LOA form under this option:

| The need for a custom LoA, and de facto the coexistence of two patent policies, highlights – and is one notable dubious patch to – the complexities introduced by the 15 March 2015 patent policy. |

Option ii(b): Remove all optional factors included in the definition of Reasonable Rate

Pros:

| While the cleanest and simplest solution to the challenges identified under Option i would be to roll back the policy to the 14 March 2015 policy, option ii(b) coupled with option ii(a) would remove two very significant hurdles, and restore some balance and some needed clarity. I believe this option, together with option ii(a), will be an important step to reinstate some of IEEE-SA’s credibility and efficiency. |
| Therefore, absent an option to roll back the policy to the 14 March 2015, I support option ii(b). |

Cons:

| The only negative of this option is that it is unfortunately limited in scope. A full roll back to the 14 March 2015 patent policy would have not only addressed ii(b), but also removed additional challenges and complexities, including the need for a custom LoA. |

Comments regarding the ongoing use of the Custom LOA form under this option:

| The need for a custom LoA, and de facto the coexistence of two patent policies, highlights – and is one notable dubious patch to – the complexities introduced by the 15 March 2015 patent policy. |
Option iii: Offer more options than before by: Allowing an LOA filer the ability to choose whether it may seek or not seek Prohibitive Orders in accordance with the current wording of the Patent Policy; and Clarifying the optionality of the factors included in the definition of Reasonable Rate.

**Pros:**

| I do not see any benefit of a hybrid solution, and therefore I do not support it. |

**Cons:**

| I do not see any benefit of a hybrid solution, and therefore I do not support it. |

**Comments regarding the ongoing use of the Custom LOA form under this option:**

The need for a custom LoA, and de facto the coexistence of two patent policies, highlights – and is one notable dubious patch to – the complexities introduced by the 15 March 2015 patent policy.
Option i: No change to the text of the 2015 Patent Policy

Pros:

The signatory hereto strongly support the current IEEE Patent Policy in the existing form. In fact, the 2015 amendment was a deliberate attempt made in the direction of balancing the positions/interests of the patent owners and potential implementers. Consequently, the current Patent Policy provides a fair treatment to both the patent holders and the users of IEEE standards, and encourages innovation throughout the supply chain. Such well-balanced policy has thus also resulted in benefitting competition and consumers, by mitigating hold up and royalty stacking, promoting competition among technologies for inclusion in standards and facilitating licensing negotiations. We, therefore, vehemently oppose any efforts to revise the policy in the manner suggested in the other options presented in this consultation.

Cons:

Various empirical studies conducted on IEEE standard-setting work since 2015 has concluded in increased activity and the publication of standardization materials, improved adoption rate, minimized litigations, etc. Given its proven success, it is needless to say that the IEEE Patent Policy in the existing form has set a benchmark for SEP licensing regimes worldwide. Further, retaining and practicing the IEEE Patent Policy in the current form would only continue to yield the benefits of a balanced licensing regime and would have no downside otherwise anticipated. Thus, it is the only right way for the IEEE to continue enforcing the 2015 Patent Policy. Considering that the policy provides a well-balanced approach and preserves the interests of the patent holders as well as implementers, there is no drawback to retaining the policy in its current form.

Comments regarding the ongoing use of the Custom LOA form under this option:

a. For standards projects that began subsequent to enforcement of the Patent Policy, all the IEEE participants should be subject to the same rules, and the custom LOA form (which was designed to keep existing rules in place for older projects) should not be permitted.

b. Perusal of the as-filed LoAs also reveal that few participants have also submitted ‘negative’ letters of assurance following the 2015 policy updates, in which patent owners indicate their willingness to license on a basis other than the new IEEE patent policy (eg, a previous policy basis). Such LoAs go against the very spirit of the IEEE Patent Policy and the process of the standard setting as the patent holders themselves offered their patents to be standard solution in the IEEE, and therefore such negative LoAs must be discouraged and not allowed.
Option ii(a): Remove all of the Patent Policy provisions regarding Prohibitive Orders

Pros:

The spirit of a healthy and well-balanced licensing regime advocates that FRAND licensing commitment precludes a patent holder from seeking prohibitive orders (e.g., injunctive relief, etc.) against an implementor who is willing to negotiate a license. The patent policies of SSOs should strive to maximize the rate of standards adoption by balancing the freedom of patent owners to collect royalties with the need to provide safeguards against possible exploitation of the standardization process and prevent SEP holders from abusing such privileged positions. The Patent Policy provides the below reliefs against the prohibitive orders:

a. Rightfully, the Patent Policy recommends consideration of license agreements obtained without explicit or implicit threat of a Prohibitive Order (and where the circumstances and resulting license are otherwise sufficiently comparable) for use in determining a Reasonable Rate. Any license obtained under a threat of a prohibitive order is bound to be at a higher than reasonable rate. Thus, this provision supports the implementers interests against patent owners who may use the threat of prohibitive order to extort higher royalty rate from on licensee and later ask all other potential licensees to take a license on a rate similar to this higher royalty rate.

b. The Patent Policy also addresses the scenario where a SEP holder is willing to make available a license for Essential Patent Claims to an unrestricted number of Applicants on a worldwide basis without compensation or under Reasonable Rates, with other reasonable terms and conditions that are demonstrably free of any unfair discrimination to make, have made, use, sell, offer to sell, or import any Compliant Implementation that practices the Essential Patent Claims for use in conforming with the IEEE Standard. Accordingly, such Accepted LOA contains a statement signifying that reasonable terms and conditions, including without compensation or under Reasonable Rates, are sufficient compensation for a license to use those Essential Patent Claims and precludes seeking, or seeking to enforce, a Prohibitive Order except as provided in this policy. This provision preserves the interests of both the implementers and the patent holders by saving the implementers from the threat of a prohibitive order while also helping patent holders to conclude licenses.

c. Also rightfully preserving the interests of the patent holders, the Policy allows the patent holder to seek a prohibitive order if the implementer fails to participate in or comply with the outcome of an adjudication by one or more courts. Thus, the Policy also prevents the rights of the patent holders by allowing them to seek prohibitive orders in certain restrictive conditions.

Conclusively, the provisions regarding prohibitive orders further protect the implementors against a potential abuse of privileged position by the patent holders. Thus, there are no benefits to removing the Patent Policy’s express limitations on prohibitive orders.
The prohibitive orders in the nature of injunctive orders pose threat of closing down businesses, product exclusion, etc. On the contrary, FRAND is about facilitating business while addressing the patent holder’s legitimate interests in obtaining reasonable compensation based on the value of their patents (exclusive of the value of the standard) from the implementors. Thus, seeking of prohibitive orders against IEEE standard-complaint devices by the patent holders would be abusive where compensation is otherwise available to make good their position. The same has also been established and put in practice by the Courts world over where national courts have refused to grant ex-parte injunctions in the SEP litigations. For instance, the Courts have categorically stated that no injunction is maintainable in at least the matters of Unwired Planet v. Huawei ([2020] UKSC 37 at the UK Supreme Court, [2017] EWHC 711 Pat at the UK High Court), Sisvel v Haier (FCJ docket no. KZR 36/17 at the German Federal Court of Justice (FCJ)), Microsoft Corp. v. Motorola Inc. (696 F.3d. 872 (9th Cir. 2012) at the United States Court Of Appeals For The Ninth Circuit), Huawei v. Conversant (Case numbers (2019) Zui Gao Fa Zhi Min Zhong No.732, (2019) Zui Gao Fa Zhi Min Zhong No.733 and (2019) Zui Gao Fa Zhi Min Zhong No.734 at the Chinese Supreme Court), Optis Cellular Technology LLC vs Apple Retail UK Limited ([2019] EWHC 3538 (Pat) at the UK High Court), Philips v. OnePlus (CS(Comm) No. 574 of 2019 at the Delhi High Court), Nokia v. Lenovo (CS (comm) no. 581/2019 at the Delhi High Court), IDC v. Xiaomi (CS (comm) no. 295/2020 at the Delhi High Court), Philips v. Vivo (CS (comm) no. 383/2020 at the Delhi High Court) and many others.

The world has also recently experienced a new global litigation strategy adopted by the SEP holders where they pursue patent rights simultaneously in multiple jurisdictions. Such strategy only causes havoc and harassment for an implementor and anyway puts the patent holder in a stronger position in the negotiations of a SEP license. Accordingly, an increasing number of anti-suit injunctions (ASIs) have been filed globally by the implementors with an aim to prevent the SEP holder from commencing or continuing the infringement or the FRAND determination proceedings in another jurisdiction while one Court in a particular jurisdiction is dealing with them. To further complicate the matter an ever-increasing trend of anti-anti-suit injunctions (AAASIs), and anti-anti-anti-suit injunctions (AAAASIs) has also been witnessed to prevent a party seeking or enforcing an ASI in the first place, have been filed in various FRAND disputes in a number of jurisdictions. These recent developments in the SEP jurisprudence only evidences the failure of enforcement of principles of the Policy that prohibits a patent owner to seek injunctive relief. By filing AASI’s, patent owners seek permission from courts to continue litigating patent infringement cases in multiple jurisdictions simultaneously. The principle or intent behind prohibiting a patent owner to seek injunction is to prevent patent owners from abusing their strong position of being SEP owners during negotiations or litigation. Allowing patent owners to continue to litigate in multiple jurisdictions simultaneously for the same technology and the same standard against the same implementer also puts the patent owner in a dominant position (similar to one achieved if the patent owner is allowed to seek an injunction). Should the restrictions on seeking prohibitive orders be removed, the patent holder’s position in the negotiations process will be further strengthened to the extent of dominance, thus destroying the balance that the Policy provisions seek to achieve.

Further, if all provisions relating to prohibitive orders are removed, the adoption rates of the IEEE standards could dramatically decrease, as lesser number of implementers would be willing to adopt a technology that is to be potentially licensed by unchecked patent holders who are free to seek prohibitive orders and thus extort higher than reasonable royalty rate from such implementers. Therefore, the Patent Policy currently is well balanced to address all stakeholder interests regarding prohibitive orders and the provisions should be retained in the Patent Policy.

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For standards projects that began subsequent to enforcement of the Patent Policy, all the IEEE participants should be subject to the same rules, and the custom LOA form (which was designed to keep existing rules in place for older projects) should not be permitted.

Option ii(b): Remove all optional factors included in the definition of Reasonable Rate

Pros:

The Patent Policy comprehensively defines the considerations for determination of the reasonable rates and such considerations are a guiding factor for a license negotiation. Moreover, given that these considerations are of an optional and a non-limiting nature, the SEP holders are also free to rely upon additional considerations for determining a reasonable rate that are demonstrably free of any unfair discrimination to make, have made, use, sell, offer to sell, or import any Compliant Implementation that practices the Essential Patent Claims for use in conforming with the IEEE Standard. Thus, when the Policy provides a benchmarking for reasonable rates and on the same hand also provides flexibility in deferring from it, there are no benefits to removing the optional factors in the definition of Reasonable Rate.

Cons:

The Patent Policy accords well with established law, and advises as to appropriate mechanisms for calculation of reasonable royalties. Such clarity can only help to reduce the uncertainty and litigation burden that has affected the standardization world over the last few years. Undermining that clarity by altering the Patent Policy would thus harm IEEE as well as IEEE members, and encourage disputes. Removing such factors shall aid patent holders to argue that such optional factors were incorrect and/or inapplicable and were thus removed from the IEEE policy, thus only triggering further disputes. Removing these optional factors would also make the Patent Policy vague in terms of the definition of a reasonable rate and it would be open for the patent holders, implementers as well as the courts in various jurisdictions to apply their own interpretation to the meaning of this term, thus, reducing clarity instead of increasing it.

Comments regarding the ongoing use of the Custom LOA form under this option:

a. For standards projects that began subsequent to enforcement of the Patent Policy, all the IEEE participants should be subject to the same rules, and the custom LOA form (which was designed to keep existing rules in place for older projects) should not be permitted.

b. Perusal of the as-filed LoAs also reveal that few participants have also submitted ‘negative’ letters of assurance following the 2015 policy updates, in which patent owners indicate their willingness to license on a basis other than the new IEEE patent policy (eg, a previous policy basis). Such LoAs go against the very spirit of the IEEE Patent Policy and the process of the standard setting as the patent holders themselves offered their patents to be standard solution in the IEEE, and therefore such negative LoAs must be discouraged and not allowed.
Option iii: Offer more options than before by: Allowing an LOA filer the ability to choose whether it may seek or not seek Prohibitive Orders in accordance with the current wording of the Patent Policy; and Clarifying the optionality of the factors included in the definition of Reasonable Rate.

Pros:

Through the current Patent Policy, and the Courts world over, it has been clearly established that an injunction is not maintainable against an Implementer in a SEP infringement suit where compensation can be provided to the SEP holder to make good its position. Regarding 3(i), it should be noted that the very aim of the Patent Policy is that an SEP holder must offer to license those patents to all applicants requesting licenses, and cannot pick and choose among licensees and that it may not seek, or threaten to seek, injunctions against potential licensees who are willing to negotiate for licenses. Thus, allowing the members to specify their own “rules” on whether the member will pursue a prohibitive order or not will not provide any advantage and will only result in ambiguity. The same will also be contrary to the established principles and the very objective of a SEP licensing regime. Regarding 3(ii), the Current Policy sufficiently defines the factors to be considered for reasonable rates, and there is no need to clarify what is already clear. Thus, any further changes to the Patent Policy text are not needed in this regard. There are no benefit to either of these options.

Cons:

Firstly, regarding 3(i), even if the members are allowed to specify their own “rules” for compliance with the Patent Policy on whether the member will pursue a prohibitive order or not, will only result in massive SEP litigations making a mockery of the SEP licensing regimes and SSOs. It should be noted that for a willing licensee, the SEP holder should be bound not seek, or threaten to seek, injunctions against potential licensees. The injunctive orders pose threat of closing businesses, product exclusion, etc. and disregard the principles of FRAND which advocates facilitating business while addressing the patent holder’s legitimate interests in obtaining reasonable compensation based on the value of their patents (exclusive of the value of the standard).

What is also important to consider is that adoption rate for the IEEE Standards will be negatively affected if the threat of injunction for implementors exists. The norm therefore should be no prohibitive injunctions, and to ensure practice of FRAND conduct by the SEP holders.

Thus, prohibitive orders in the nature of injunctive orders should be discouraged against IEEE standard-complaint devices as it would amount to an abuse of the process where compensation is otherwise available to the SEP holder. The Patent Policy currently is well balanced to address all stakeholder interests with regard to issue of prohibitive orders.

Secondly, regarding 3(ii), there is no need to clarify what is already clear. The Patent Policy comprehensively defines the considerations for determination of the reasonable rates, such considerations are a guiding factor for a license negotiation. Moreover, given that these considerations are of option and a non-limiting nature, the SEP holder’s are also free to rely upon additional considerations for determining a reasonable rate that are demonstrably free of any unfair discrimination to make, have made, use, sell, offer to sell, or import any Compliant Implementation that practices the Essential Patent Claims for use in conforming with the IEEE Standard. Changes to the Patent Policy text are not needed in this regard and would rather cause misperceptions than to resolve it.
**Comments regarding the ongoing use of the Custom LOA form under this option:**

a. For standards projects that began subsequent to enforcement of the Patent Policy, all the IEEE participants should be subject to the same rules, and the custom LOA form (which was designed to keep existing rules in place for older projects) should not be permitted.

b. Perusal of the as-filed LoAs also reveal that few participants have also submitted ‘negative’ letters of assurance following the 2015 policy updates, in which patent owners indicate their willingness to license on a basis other than the new IEEE patent policy (eg, a previous policy basis). Such LoAs go against the very spirit of the IEEE Patent Policy and the process of the standard setting as the patent holders themselves offered their patents to be standard solution in the IEEE, and therefore such negative LoAs must be discouraged and not allowed.
The IEEE-SA Patent Policy provides a fair, balanced approach to SEP licensing issues for patent owners and licensees. All parties, and in particular small business innovator like us, have reasonably clarity and information regarding licensing approaches, such that they can develop, invest in, innovate around, and implement IEEE-SA standards.

The current version of the IEEE-SA Patent Policy is based on demonstrated increasing attempts by some owners of SEPs to exploit fair, reasonable, and non-discriminatory (FRAND) agreements. The updates clarified the narrow set of circumstances when SEP holders can employ prohibitive orders against someone using an IEEE-SA standard, reiterated that the FRAND commitment required SEP holders to license to all willing licensees, and provided guidance on what “reasonable” means in the context of royalty analysis. Small businesses that build internet of things (IoT) products that enable and rely on IEEE-SA standards to support interoperability heavily rely on the clarity the current policy provides. It has demonstrably reduced SEP licensing-related abuses, deters unnecessary and burdensome litigation, and supports ingenuity and innovation in the market. We have benefited from the clarity and certainty that the 2015 Patent Policy provides. Our experts contribute to use or build to IEEE standards and we share a common interest that standardization activities in IEEE continue to thrive and address the needs to IEEE stakeholders. The 2015 Patent Policy is helping achieve these needs.

At the time of their adoption, the 2015 Updates were supported by an overwhelming number of IEEE-SA participants and industry stakeholders. We further note that the 2015 Updates were enacted following approvals by super-majorities at multiple levels of the IEEE’s governance hierarchy.

The empirical record demonstrates that the 2015 Patent Policy has facilitated unprecedented growth and success for IEEE-SA and its standards. In the years since the policy updates went into effect, ever-increasing evidence demonstrates the benefits of IEEE-SA’s approach, particularly in comparison to other standards-setting organizations such as the European Telecommunications Standards Institute (ETSI):

**Option i: No change to the text of the 2015 Patent Policy**

**Pros:**

The IEEE-SA Patent Policy provides a fair, balanced approach to SEP licensing issues for patent owners and licensees. All parties, and in particular small business innovator like us, have reasonably clarity and information regarding licensing approaches, such that they can develop, invest in, innovate around, and implement IEEE-SA standards.

The current version of the IEEE-SA Patent Policy is based on demonstrated increasing attempts by some owners of SEPs to exploit fair, reasonable, and non-discriminatory (FRAND) agreements. The updates clarified the narrow set of circumstances when SEP holders can employ prohibitive orders against someone using an IEEE-SA standard, reiterated that the FRAND commitment required SEP holders to license to all willing licensees, and provided guidance on what “reasonable” means in the context of royalty analysis. Small businesses that build internet of things (IoT) products that enable and rely on IEEE-SA standards to support interoperability heavily rely on the clarity the current policy provides. It has demonstrably reduced SEP licensing-related abuses, deters unnecessary and burdensome litigation, and supports ingenuity and innovation in the market. We have benefited from the clarity and certainty that the 2015 Patent Policy provides. Our experts contribute to use or build to IEEE standards and we share a common interest that standardization activities in IEEE continue to thrive and address the needs to IEEE stakeholders. The 2015 Patent Policy is helping achieve these needs.

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-Total Technical Contributions to IEEE-SA Standards Have Increased Since 2015: The research firm IPLytics analyzed technical contributions to the IEEE-SA Standards Association before and after the policy updates and found a clear and consistent increase since the policy was adopted. After two years of declining technical contributions to IEEE-SA standards in 2013 and 2014, total contributions rebounded after the new policy was enacted in 2015 and IEEE-SA had a record number in 2017.

In the IEEE-SA 802 working groups, which are responsible for Wi-Fi standards, technical contributions continued to increase after the policy update leading to a record number in 2018. This finding led them to conclude that “patent policy considerations have not been a significant factor in companies’ decisions about whether to invest in and submit technologies to IEEE-SA 802 working groups.” Even in the most patent-heavy IEEE-SA 802 working groups, IPLytics found that contributions increased in line with total technical contributions to all 802 working groups.

-Uncertainty & Confusion in ETSI FRAND Terms Are Responsible for 75 percent of All SEP Litigation in Past 20 Years: One of the clearest indicators of uncertainty and confusion within contracts and other legal texts is the amount of litigation that they spawn. Litigation over SEPs in digital communications standards like LTE has grown exponentially in recent years, more than quadrupling between 2009 and 2017 alone according to analysis from darts-ip. Additionally, IPLytics analyzed twenty years of worldwide SEP litigation, from 2001-2021, and found that more than 75 percent of that litigation was related to 2G, 3G, 4G and 5G standards. Meanwhile, just two percent of SEP litigation during the same time period was related to IEEE’s Wi-Fi standards.

-IEEE-SA is Delivering on its Mission & The True Goals of Standardization: Each standards setting organization picks the approach that fits its goals best. Time and time again, the IEEE’s approach has proven to be a better approach for delivering on the organization’s standardization goals and the well-established role of technical interoperability standards.

The goal of IEEE’s standards development process, according to its Standards Development Principles, is to develop technical standards that “enable innovation, and open new market opportunities to their users by allowing interoperability of products, services, and processes; and they create ecosystems that promote economies of scale and healthy competition. These attributes are essential to help ensure that markets remain open, allowing consumers to have choice and allowing new entrants to successfully enter markets.” IEEE’s Wi-Fi standards unequivocally meet these goals. The dynamic ecosystem of companies that build Wi-Fi compatible products is unparalleled. Competition at every level of the Wi-Fi technology industry is fierce, and startups are able to compete and thrive in the marketplace. Moreover, Wi-Fi plays an important role in IoT-based technologies and their applications, and nearly every industry has adopted the Wi-Fi standard for connecting their products wirelessly to the internet. In 2020 alone, the Wi-Fi Alliance, which drives global Wi-Fi adoption and evolution through thought leadership, spectrum advocacy, and industry-wide collaboration, certified 8752 devices from 306 companies. These numbers, however, downplay the size and scope of the Wi-Fi ecosystem because a significant (and growing) percentage of small businesses that build Wi-Fi compatible products don’t pursue certification through the Alliance. Importantly, each device certification can cover thousands or even millions of units.

IEEE’s requirement that SEP holders must license their patents to companies at both the product and component level allows companies with little experience in wireless networking or SEP licensing to integrate Wi-Fi into their products rapidly and seamlessly.

By contrast, the evidence is clear that the public arguments made against the IEEE’s updated policy are without merit. The updates have had no negative effects on participation or contributions of
patented technology to IEEE-SA standards, and they helped ensure that IEEE’s Standards Association continues to deliver on its mission. The IEEE-SA should put its mission and the standards ecosystem (including the Wi-Fi ecosystem) first and reject the self-serving demands of a few vocal companies seeking to rescind the 2015 Patent Policy for their narrow gains.

Cons:

Changing the IEEE-SA Patent Policy would not provide any meaningful benefits. Undoing the clarifications made to the Patent Policy in 2015 would simply enable the same SEP abuses (and negative impacts of that abuse) that IEEE-SA has already recognized and taken successful steps to prevent. Further, changes to the IEEE-SA policy would, by undercutting the certainty it provides, negatively impact participation of small business innovators across consumer and enterprise verticals that have come to rely on its clarity.

Comments regarding the ongoing use of the Custom LOA form under this option:

Use of the Custom LOA for IEEE-SA projects initiated prior to March 2015 can be supported. Use of the Custom LOA should not be permitted for other projects, since all parties involved would have been aware of the terms of the IEEE-SA Patent Policy when joining such projects.

Option ii(a): Remove all of the Patent Policy provisions regarding Prohibitive Orders

Pros:

Changing the IEEE-SA Patent Policy would not create any meaningful benefits. Undoing the clarifications made to the Patent Policy in 2015 would simply enable the same SEP abuses effected by SEP holders systematically seeking prohibitive orders despite their FRAND commitments on IEEE-SA standards (and negative impacts of that abuse) that IEEE-SA has already recognized and taken successful steps to prevent. Consistent with a growing number of enforcement actions by competition regulators and courts across key jurisdictions, removing provisions regarding prohibitive orders from the IEEE-SA Patent Policy would support SEP holders that have made a voluntary FRAND commitment being able to refuse to license, or bring an injunction against, a party that is willing to take a license based on FRAND terms, which is exclusionary conduct under antitrust laws. Further, changes to the IEEE-SA policy would, by undercutting the certainty it provides, negatively impacting participation from small businesses that have come to rely on its clarity.
Cons:

In the context of SEPs, prohibitive orders (injunctions from a district court or exclusion orders from the International Trade Commission) are the opposite of licensing. Their only purpose – except in rare circumstances where court adjudication is not possible – is to hold up those that build or rely on IEEE-SA standards and to pressure those same innovators to agree to supra-FRAND SEP licensing terms. The negative effects of abusive licensing of SEPs can be particularly harmful to small business innovators that both hold SEPs and use standards in their products, and do not have the resources to deal with larger enterprises holding numerous SEPs. Without the IEEE-SA Patent Policy’s clarifications, small business innovators face potential financially debilitating litigation with no predictable outcome or are forced to accept excessive royalty demands made by the SEP holders. In the worst case, small business innovators may be forced to change their product, or abandon their business plan altogether, if they cannot afford the litigation or the supra-FRAND SEP licenses. The net result is that consumers lose, and innovation is negatively impacted. The current IEEE-SA Patent Policy appropriately recognizes this, and fairly balances the patent owner’s ability to seek FRAND compensation against the implementer’s ability to be free from improper “market exclusion” tactics.

Comments regarding the ongoing use of the Custom LOA form under this option:

Use of the Custom LOA for IEEE-SA projects initiated prior to March 2015 can be supported. Use of the Custom LOA should not be permitted for other projects, since all parties involved would have been aware of the terms of the IEEE-SA Patent Policy when joining such projects.

Option ii(b): Remove all optional factors included in the definition of Reasonable Rate

Pros:

Changing the IEEE-SA Patent Policy would not create any meaningful benefits. IEEE-SA’s current Patent Policy provides much needed guidance on what a reasonable rate is in the context of the FRAND commitment (that a reasonable rate for a valid, infringed, and enforceable FRAND-encumbered SEP should be based on the value of the patented invention itself, rather than its inclusion in the standard, real or hypothetical uses of the standard at the end of a value chain, etc.), which has provided certainty to the entire ecosystem, and to small business innovators in particular.

Cons:

The IEEE-SA Patent Policy currently provides appropriate clarity and predictability for FRAND licensing. Losing or reducing that clarity would have only negative effects, and would enable SEP owners to engage in abusive holdup and achieve supra-FRAND royalty terms. Since 2015, IEEE-SA’s Patent Policy has significantly contributed to avoiding two well-established, and deleterious effects: royalty stacking, when the cumulative demands for SEP licenses cascade to make accepting them economically unviable; and patent holdup, where a SEP holder demands supra-FRAND royalties or (other unreasonable requirements) from potential user of the standard, preventing licensing. The clarity provided by IEEE-SA’s Patent Policy is critical to small business innovators that rely on FRAND access to SEPs, and removing clarifications addressing the definition of a reasonable rate would undermine our ability to participate in IEEE-SA standardization or to compete using standardized technologies.
Comments regarding the ongoing use of the Custom LOA form under this option:

Use of the Custom LOA for IEEE-SA projects initiated prior to March 2015 can be supported. Use of the Custom LOA should not be permitted for other projects, since all parties involved would have been aware of the terms of the IEEE-SA Patent Policy when joining such projects.

Option iii: Offer more options than before by: Allowing an LOA filer the ability to choose whether it may seek or not seek Prohibitive Orders in accordance with the current wording of the Patent Policy; and Clarifying the optionality of the factors included in the definition of Reasonable Rate.

Pros:

Changing the IEEE-SA Patent Policy would not create any meaningful benefits. Undoing the clarifications made to the Patent Policy in 2015 would simply enable the same SEP abuses effected by a small and vocal group of SEP holders systematically seeking prohibitive orders and demanding abusive SEP royalties despite their FRAND commitments on IEEE-SA standards (and negative impacts of that abuse) that IEEE-SA has already recognized and taken successful steps to prevent. Small business innovators are particularly vulnerable to abusive SEP behaviors because they have limited resources.

Cons:

As previously noted, injunctions (prohibitive orders) are the opposite of licensing. Their only purpose – except in rare circumstances where court adjudication is not possible – is to hold up implementers of IEEE-SA standards to force them to pay non-FRAND licensing fees. The IEEE-SA Patent Policy appropriately recognizes this, and fairly balances the patent owner’s ability to seek FRAND compensation against the implementer’s ability to be free from improper “market exclusion” tactics. Consistent with a growing number of enforcement actions by competition regulators and courts across key jurisdictions, removing provisions regarding prohibitive orders from the IEEE-SA Patent Policy would support SEP holders that have made a voluntary FRAND commitment being able to refuse to license, or bring an injunction against, a party that is willing to take a license based on FRAND terms, which is exclusionary conduct under antitrust laws. Further, changes to the IEEE-SA policy would, by undercutting the certainty it provides, negatively impact participation from small business innovators that have come to rely on its clarity. IEEE-SA should not create new, separate “options” with respect to prohibitive orders that would allow some IEEE-SA participants to unfairly seek injunctions targeting use of IEEE-SA standards.

The IEEE-SA Patent Policy is already very clear that the optional factors included in the definition of “Reasonable Rate” are, in fact, optional. There is no need to seek further changes to the Patent Policy to clarify what is already clearly stated.

Comments regarding the ongoing use of the Custom LOA form under this option:

Use of the Custom LOA for IEEE-SA projects initiated prior to March 2015 can be supported. Use of the Custom LOA should not be permitted for other projects, since all parties involved would have been aware of the terms of the IEEE-SA Patent Policy when joining such projects.
The IEEE-SA Patent Policy provides a fair, balanced approach to SEP licensing issues for patent owners and licensees. All parties, and in particular small business innovator like us, have reasonably clarity and information regarding licensing approaches, such that they can develop, invest in, innovate around, and implement IEEE-SA standards.

The current version of the IEEE-SA Patent Policy is based on demonstrated increasing attempts by some owners of SEPs to exploit fair, reasonable, and non-discriminatory (FRAND) agreements. The updates clarified the narrow set of circumstances when SEP holders can employ prohibitive orders against someone using an IEEE-SA standard, reiterated that the FRAND commitment required SEP holders to license to all willing licensees, and provided guidance on what “reasonable” means in the context of royalty analysis. Small businesses that build internet of things (IoT) products that enable and rely on IEEE-SA standards to support interoperability heavily rely on the clarity the current policy provides. It has demonstrably reduced SEP licensing-related abuses, deters unnecessary and burdensome litigation, and supports ingenuity and innovation in the market. We have benefited from the clarity and certainty that the 2015 Patent Policy provides. Our experts contribute to use or build to IEEE standards and we share a common interest that standardization activities in IEEE continue to thrive and address the needs to IEEE stakeholders. The 2015 Patent Policy is helping achieve these needs.

At the time of their adoption, the 2015 Updates were supported by an overwhelming number of IEEE-SA participants and industry stakeholders. We further note that the 2015 Updates were enacted following approvals by super-majorities at multiple levels of the IEEE’s governance hierarchy.

The empirical record demonstrates that the 2015 Patent Policy has facilitated unprecedented growth and success for IEEE-SA and its standards. In the years since the policy updates went into effect, ever-increasing evidence demonstrates the benefits of IEEE-SA’s approach, particularly in comparison to other standards-setting organizations such as the European Telecommunications...
Standards Institute (ETSI):

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IEEE’s requirement that SEP holders must license their patents to companies at both the product and component level allows companies with little experience in wireless networking or SEP licensing to integrate Wi-Fi into their products rapidly and seamlessly.

By contrast, the evidence is clear that the public arguments made against the IEEE’s updated policy...
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Cons:

Changing the IEEE-SA Patent Policy would not provide any meaningful benefits. Undoing the clarifications made to the Patent Policy in 2015 would simply enable the same SEP abuses (and negative impacts of that abuse) that IEEE-SA has already recognized and taken successful steps to prevent. Further, changes to the IEEE-SA policy would, by undercutting the certainty it provides, negatively impact participation of small business innovators across consumer and enterprise verticals that have come to rely on its clarity.

Comments regarding the ongoing use of the Custom LOA form under this option:

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Option ii(a): Remove all of the Patent Policy provisions regarding Prohibitive Orders

Pros:

Changing the IEEE-SA Patent Policy would not create any meaningful benefits. Undoing the clarifications made to the Patent Policy in 2015 would simply enable the same SEP abuses effected by SEP holders systematically seeking prohibitive orders despite their FRAND commitments on IEEE-SA standards (and negative impacts of that abuse) that IEEE-SA has already recognized and taken successful steps to prevent. Consistent with a growing number of enforcement actions by competition regulators and courts across key jurisdictions, removing provisions regarding prohibitive orders from the IEEE-SA Patent Policy would support SEP holders that have made a voluntary FRAND commitment being able to refuse to license, or bring an injunction against, a party that is willing to take a license based on FRAND terms, which is exclusionary conduct under antitrust laws. Further, changes to the IEEE-SA policy would, by undercutting the certainty it provides, negatively impacting participation from small businesses that have come to rely on its clarity.
Cons:

In the context of SEPs, prohibitive orders (injunctions from a district court or exclusion orders from the International Trade Commission) are the opposite of licensing. Their only purpose – except in rare circumstances where court adjudication is not possible – is to hold up those that build or rely on IEEE-SA standards and to pressure those same innovators to agree to supra-FRAND SEP licensing terms. The negative effects of abusive licensing of SEPs can be particularly harmful to small business innovators that both hold SEPs and use standards in their products, and do not have the resources to deal with larger enterprises holding numerous SEPs. Without the IEEE-SA Patent Policy’s clarifications, small business innovators face potential financially debilitating litigation with no predictable outcome or are forced to accept excessive royalty demands made by the SEP holders. In the worst case, small business innovators may be forced to change their product, or abandon their business plan altogether, if they cannot afford the litigation or the supra-FRAND SEP licenses. The net result is that consumers lose, and innovation is negatively impacted. The current IEEE-SA Patent Policy appropriately recognizes this, and fairly balances the patent owner’s ability to seek FRAND compensation against the implementer’s ability to be free from improper “market exclusion” tactics.

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Option ii(b): Remove all optional factors included in the definition of Reasonable Rate

Pros:

Changing the IEEE-SA Patent Policy would not create any meaningful benefits. IEEE-SA’s current Patent Policy provides much needed guidance on what a reasonable rate is in the context of the FRAND commitment (that a reasonable rate for a valid, infringed, and enforceable FRAND-encumbered SEP should be based on the value of the patented invention itself, rather than its inclusion in the standard, real or hypothetical uses of the standard at the end of a value chain, etc.), which has provided certainty to the entire ecosystem, and to small business innovators in particular.

Cons:

The IEEE-SA Patent Policy currently provides appropriate clarity and predictability for FRAND licensing. Losing or reducing that clarity would have only negative effects, and would enable SEP owners to engage in abusive holdup and achieve supra-FRAND royalty terms. Since 2015, IEEE-SA’s Patent Policy has significantly contributed to avoiding two well-established, and deleterious effects: royalty stacking, when the cumulative demands for SEP licenses cascade to make accepting them economically unviable; and patent holdup, where a SEP holder demands supra-FRAND royalties or (other unreasonable requirements) from potential user of the standard, preventing licensing. The clarity provided by IEEE-SA’s Patent Policy is critical to small business innovators that rely on FRAND access to SEPs, and removing clarifications addressing the definition of a reasonable rate would undermine our ability to participate in IEEE-SA standardization or to compete using standardized technologies.
Comments regarding the ongoing use of the Custom LOA form under this option:

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Option iii: Offer more options than before by: Allowing an LOA filer the ability to choose whether it may seek or not seek Prohibitive Orders in accordance with the current wording of the Patent Policy; and Clarifying the optionality of the factors included in the definition of Reasonable Rate.

Pros:

Changing the IEEE-SA Patent Policy would not create any meaningful benefits. Undoing the clarifications made to the Patent Policy in 2015 would simply enable the same SEP abuses effected by a small and vocal group of SEP holders systematically seeking prohibitive orders and demanding abusive SEP royalties despite their FRAND commitments on IEEE-SA standards (and negative impacts of that abuse) that IEEE-SA has already recognized and taken successful steps to prevent. Small business innovators are particularly vulnerable to abusive SEP behaviors because they have limited resources.

Cons:

As previously noted, injunctions (prohibitive orders) are the opposite of licensing. Their only purpose – except in rare circumstances where court adjudication is not possible – is to hold up implementers of IEEE-SA standards to force them to pay non-FRAND licensing fees. The IEEE-SA Patent Policy appropriately recognizes this, and fairly balances the patent owner’s ability to seek FRAND compensation against the implementer’s ability to be free from improper “market exclusion” tactics. Consistent with a growing number of enforcement actions by competition regulators and courts across key jurisdictions, removing provisions regarding prohibitive orders from the IEEE-SA Patent Policy would support SEP holders that have made a voluntary FRAND commitment being able to refuse to license, or bring an injunction against, a party that is willing to take a license based on FRAND terms, which is exclusionary conduct under antitrust laws. Further, changes to the IEEE-SA policy would, by undercutting the certainty it provides, negatively impact participation from small business innovators that have come to rely on its clarity. IEEE-SA should not create new, separate “options” with respect to prohibitive orders that would allow some IEEE-SA participants to unfairly seek injunctions targeting use of IEEE-SA standards.

The IEEE-SA Patent Policy is already very clear that the optional factors included in the definition of “Reasonable Rate” are, in fact, optional. There is no need to seek further changes to the Patent Policy to clarify what is already clearly stated.

Comments regarding the ongoing use of the Custom LOA form under this option:

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The current version of the IEEE-SA Patent Policy is based on demonstrated increasing attempts by some owners of SEPs to exploit fair, reasonable, and non-discriminatory (FRAND) agreements. The updates clarified the narrow set of circumstances when SEP holders can employ prohibitive orders against someone using an IEEE-SA standard, reiterated that the FRAND commitment required SEP holders to license to all willing licensees, and provided guidance on what “reasonable” means in the context of royalty analysis. Small businesses that build internet of things (IoT) products that enable and rely on IEEE-SA standards to support interoperability heavily rely on the clarity the current policy provides. It has demonstrably reduced SEP licensing-related abuses, deters unnecessary and burdensome litigation, and supports ingenuity and innovation in the market. We have benefited from the clarity and certainty that the 2015 Patent Policy provides. Our experts contribute to use or build to IEEE standards and we share a common interest that standardization activities in IEEE continue to thrive and address the needs to IEEE stakeholders. The 2015 Patent Policy is helping achieve these needs.

At the time of their adoption, the 2015 Updates were supported by an overwhelming number of IEEE-SA participants and industry stakeholders. We further note that the 2015 Updates were enacted following approvals by super-majorities at multiple levels of the IEEE’s governance hierarchy.

The empirical record demonstrates that the 2015 Patent Policy has facilitated unprecedented growth and success for IEEE-SA and its standards. In the years since the policy updates went into effect, ever-increasing evidence demonstrates the benefits of IEEE-SA’s approach, particularly in comparison to other standards-setting organizations such as the European Telecommunications
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Cons:

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### Cons:

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### Option ii(b): Remove all optional factors included in the definition of Reasonable Rate

#### Pros:

Changing the IEEE-SA Patent Policy would not create any meaningful benefits. IEEE-SA’s current Patent Policy provides much needed guidance on what a reasonable rate is in the context of the FRAND commitment (that a reasonable rate for a valid, infringed, and enforceable FRAND-encumbered SEP should be based on the value of the patented invention itself, rather than its inclusion in the standard, real or hypothetical uses of the standard at the end of a value chain, etc.), which has provided certainty to the entire ecosystem, and to small business innovators in particular.

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#### Pros:

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Pros:

Changing the IEEE-SA Patent Policy would not create any meaningful benefits. Undoing the clarifications made to the Patent Policy in 2015 would simply enable the same SEP abuses effected by a small and vocal group of SEP holders systematically seeking prohibitive orders and demanding abusive SEP royalties despite their FRAND commitments on IEEE-SA standards (and negative impacts of that abuse) that IEEE-SA has already recognized and taken successful steps to prevent. Small business innovators are particularly vulnerable to abusive SEP behaviors because they have limited resources.

Cons:

As previously noted, injunctions (prohibitive orders) are the opposite of licensing. Their only purpose – except in rare circumstances where court adjudication is not possible – is to hold up implementers of IEEE-SA standards to force them to pay non-FRAND licensing fees. The IEEE-SA Patent Policy appropriately recognizes this, and fairly balances the patent owner’s ability to seek FRAND compensation against the implementer’s ability to be free from improper “market exclusion” tactics. Consistent with a growing number of enforcement actions by competition regulators and courts across key jurisdictions, removing provisions regarding prohibitive orders from the IEEE-SA Patent Policy would support SEP holders that have made a voluntary FRAND commitment being able to refuse to license, or bring an injunction against, a party that is willing to take a license based on FRAND terms, which is exclusionary conduct under antitrust laws. Further, changes to the IEEE-SA policy would, by undercutting the certainty it provides, negatively impact participation from small business innovators that have come to rely on its clarity. IEEE-SA should not create new, separate “options” with respect to prohibitive orders that would allow some IEEE-SA participants to unfairly seek injunctions targeting use of IEEE-SA standards.

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Cons:

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Option ii(a): Remove all of the Patent Policy provisions regarding Prohibitive Orders

Pros:

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Cons:

In the context of SEPs, prohibitive orders (injunctions from a district court or exclusion orders from the International Trade Commission) are the opposite of licensing. Their only purpose – except in rare circumstances where court adjudication is not possible – is to hold up those that build or rely on IEEE-SA standards and to pressure those same innovators to agree to supra-FRAND SEP licensing terms. The negative effects of abusive licensing of SEPs can be particularly harmful to small business innovators that both hold SEPs and use standards in their products, and do not have the resources to deal with larger enterprises holding numerous SEPs. Without the IEEE-SA Patent Policy’s clarifications, small business innovators face potential financially debilitating litigation with no predictable outcome or are forced to accept excessive royalty demands made by the SEP holders. In the worst case, small business innovators may be forced to change their product, or abandon their business plan altogether, if they cannot afford the litigation or the supra-FRAND SEP licenses. The net result is that consumers lose, and innovation is negatively impacted. The current IEEE-SA Patent Policy appropriately recognizes this, and fairly balances the patent owner’s ability to seek FRAND compensation against the implementer’s ability to be free from improper “market exclusion” tactics.

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Option ii(b): Remove all optional factors included in the definition of Reasonable Rate

Pros:

Changing the IEEE-SA Patent Policy would not create any meaningful benefits. IEEE-SA’s current Patent Policy provides much needed guidance on what a reasonable rate is in the context of the FRAND commitment (that a reasonable rate for a valid, infringed, and enforceable FRAND-encumbered SEP should be based on the value of the patented invention itself, rather than its inclusion in the standard, real or hypothetical uses of the standard at the end of a value chain, etc.), which has provided certainty to the entire ecosystem, and to small business innovators in particular.

Cons:

The IEEE-SA Patent Policy currently provides appropriate clarity and predictability for FRAND licensing. Losing or reducing that clarity would have only negative effects, and would enable SEP owners to engage in abusive holdup and achieve supra-FRAND royalty terms. Since 2015, IEEE-SA’s Patent Policy has significantly contributed to avoiding two well-established, and deleterious effects: royalty stacking, when the cumulative demands for SEP licenses cascade to make accepting them economically unviable; and patent holdup, where a SEP holder demands supra-FRAND royalties or (other unreasonable requirements) from potential user of the standard, preventing licensing. The clarity provided by IEEE-SA’s Patent Policy is critical to small business innovators that rely on FRAND access to SEPs, and removing clarifications addressing the definition of a reasonable rate would undermine our ability to participate in IEEE-SA standardization or to compete using standardized technologies.
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Pros:

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By contrast, the evidence is clear that the public arguments made against the IEEE’s updated policy are without merit. The updates have had no negative effects on participation or contributions of patented technology to IEEE-SA standards, and they helped ensure that IEEE’s Standards Association continues to deliver on its mission. The IEEE-SA should put its mission and the standards ecosystem (including the Wi-Fi ecosystem) first and reject the self-serving demands of a few vocal companies seeking to rescind the 2015 Patent Policy for their narrow gains.
Cons:

Changing the IEEE-SA Patent Policy would not provide any meaningful benefits. Undoing the clarifications made to the Patent Policy in 2015 would simply enable the same SEP abuses (and negative impacts of that abuse) that IEEE-SA has already recognized and taken successful steps to prevent. Further, changes to the IEEE-SA policy would, by undercutting the certainty it provides, negatively impact participation of small business innovators across consumer and enterprise verticals that have come to rely on its clarity.

Comments regarding the ongoing use of the Custom LOA form under this option:

Use of the Custom LOA for IEEE-SA projects initiated prior to March 2015 can be supported. Use of the Custom LOA should not be permitted for other projects, since all parties involved would have been aware of the terms of the IEEE-SA Patent Policy when joining such projects.

Option ii(a): Remove all of the Patent Policy provisions regarding Prohibitive Orders

Pros:

Changing the IEEE-SA Patent Policy would not create any meaningful benefits. Undoing the clarifications made to the Patent Policy in 2015 would simply enable the same SEP abuses effected by SEP holders systematically seeking prohibitive orders despite their FRAND commitments on IEEE-SA standards (and negative impacts of that abuse) that IEEE-SA has already recognized and taken successful steps to prevent. Consistent with a growing number of enforcement actions by competition regulators and courts across key jurisdictions, removing provisions regarding prohibitive orders from the IEEE-SA Patent Policy would support SEP holders that have made a voluntary FRAND commitment being able to refuse to license, or bring an injunction against, a party that is willing to take a license based on FRAND terms, which is exclusionary conduct under antitrust laws. Further, changes to the IEEE-SA policy would, by undercutting the certainty it provides, negatively impacting participation from small businesses that have come to rely on its clarity.

Cons:

In the context of SEPs, prohibitive orders (injunctions from a district court or exclusion orders from the International Trade Commission) are the opposite of licensing. Their only purpose – except in rare circumstances where court adjudication is not possible – is to hold up those that build or rely on IEEE-SA standards and to pressure those same innovators to agree to supra-FRAND SEP licensing terms. The negative effects of abusive licensing of SEPs can be particularly harmful to small business innovators that both hold SEPs and use standards in their products, and do not have the resources to deal with larger enterprises holding numerous SEPs. Without the IEEE-SA Patent Policy’s clarifications, small business innovators face potential financially debilitating litigation with no predictable outcome or are forced to accept excessive royalty demands made by the SEP holders. In the worst case, small business innovators may be forced to change their product, or abandon their business plan altogether, if they cannot afford the litigation or the supra-FRAND SEP licenses. The net result is that consumers lose, and innovation is negatively impacted. The current IEEE-SA Patent Policy appropriately recognizes this, and fairly balances the patent owner’s ability to seek FRAND compensation against the implementer’s ability to be free from improper “market exclusion” tactics.
Comments regarding the ongoing use of the Custom LOA form under this option:

<table>
<thead>
<tr>
<th>Use of the Custom LOA for IEEE-SA projects initiated prior to March 2015 can be supported. Use of the Custom LOA should not be permitted for other projects, since all parties involved would have been aware of the terms of the IEEE-SA Patent Policy when joining such projects.</th>
</tr>
</thead>
</table>

**Option ii(b): Remove all optional factors included in the definition of Reasonable Rate**

**Pros:**

Changing the IEEE-SA Patent Policy would not create any meaningful benefits. IEEE-SA’s current Patent Policy provides much needed guidance on what a reasonable rate is in the context of the FRAND commitment (that a reasonable rate for a valid, infringed, and enforceable FRAND-encumbered SEP should be based on the value of the patented invention itself, rather than its inclusion in the standard, real or hypothetical uses of the standard at the end of a value chain, etc.), which has provided certainty to the entire ecosystem, and to small business innovators in particular.

**Cons:**

The IEEE-SA Patent Policy currently provides appropriate clarity and predictability for FRAND licensing. Losing or reducing that clarity would have only negative effects, and would enable SEP owners to engage in abusive holdup and achieve supra-FRAND royalty terms. Since 2015, IEEE-SA’s Patent Policy has significantly contributed to avoiding two well-established, and deleterious effects: royalty stacking, when the cumulative demands for SEP licenses cascade to make accepting them economically unviable; and patent holdup, where a SEP holder demands supra-FRAND royalties or (other unreasonable requirements) from potential user of the standard, preventing licensing. The clarity provided by IEEE-SA’s Patent Policy is critical to small business innovators that rely on FRAND access to SEPs, and removing clarifications addressing the definition of a reasonable rate would undermine our ability to participate in IEEE-SA standardization or to compete using standardized technologies.

Comments regarding the ongoing use of the Custom LOA form under this option:

<table>
<thead>
<tr>
<th>Use of the Custom LOA for IEEE-SA projects initiated prior to March 2015 can be supported. Use of the Custom LOA should not be permitted for other projects, since all parties involved would have been aware of the terms of the IEEE-SA Patent Policy when joining such projects.</th>
</tr>
</thead>
</table>
Option iii: Offer more options than before by: Allowing an LOA filer the ability to choose whether it may seek or not seek Prohibitive Orders in accordance with the current wording of the Patent Policy; and Clarifying the optionality of the factors included in the definition of Reasonable Rate.

Pros:

Changing the IEEE-SA Patent Policy would not create any meaningful benefits. Undoing the clarifications made to the Patent Policy in 2015 would simply enable the same SEP abuses effected by a small and vocal group of SEP holders systematically seeking prohibitive orders and demanding abusive SEP royalties despite their FRAND commitments on IEEE-SA standards (and negative impacts of that abuse) that IEEE-SA has already recognized and taken successful steps to prevent. Small business innovators are particularly vulnerable to abusive SEP behaviors because they have limited resources.

Cons:

As previously noted, injunctions (prohibitive orders) are the opposite of licensing. Their only purpose – except in rare circumstances where court adjudication is not possible – is to hold up implementers of IEEE-SA standards to force them to pay non-FRAND licensing fees. The IEEE-SA Patent Policy appropriately recognizes this, and fairly balances the patent owner’s ability to seek FRAND compensation against the implementer’s ability to be free from improper “market exclusion” tactics. Consistent with a growing number of enforcement actions by competition regulators and courts across key jurisdictions, removing provisions regarding prohibitive orders from the IEEE-SA Patent Policy would support SEP holders that have made a voluntary FRAND commitment being able to refuse to license, or bring an injunction against, a party that is willing to take a license based on FRAND terms, which is exclusionary conduct under antitrust laws. Further, changes to the IEEE-SA policy would, by undercutting the certainty it provides, negatively impact participation from small business innovators that have come to rely on its clarity. IEEE-SA should not create new, separate “options” with respect to prohibitive orders that would allow some IEEE-SA participants to unfairly seek injunctions targeting use of IEEE-SA standards.

The IEEE-SA Patent Policy is already very clear that the optional factors included in the definition of “Reasonable Rate” are, in fact, optional. There is no need to seek further changes to the Patent Policy to clarify what is already clearly stated.

Comments regarding the ongoing use of the Custom LOA form under this option:

Use of the Custom LOA for IEEE-SA projects initiated prior to March 2015 can be supported. Use of the Custom LOA should not be permitted for other projects, since all parties involved would have been aware of the terms of the IEEE-SA Patent Policy when joining such projects.
Option i: No change to the text of the 2015 Patent Policy

Pros:

The IEEE-SA Patent Policy provides a fair, balanced approach to standard-essential patent (SEP) licensing issues for patent owners and licensees. All parties, and the App Association’s thousands of small business innovator members in particular, should have reasonable clarity and information regarding licensing approaches, so they can develop, invest in, innovate around, and implement IEEE-SA standards.

The current version of the IEEE-SA Patent Policy reflects demonstrated increasing attempts by some owners of SEPs to exploit fair, reasonable, and non-discriminatory (FRAND) agreements. The updates clarified the narrow set of circumstances when SEP holders can employ prohibitive orders against someone using an IEEE-SA standard, reiterated that the FRAND commitment required SEP holders to license to all willing licensees, and provided guidance on what “reasonable” means in the context of royalty analysis. App Association small business members that build internet of things (IoT) products that enable and rely on IEEE-SA standards to support interoperability rely on the clarity the current policy provides. This policy demonstrably reduced SEP licensing-related abuses, deters unnecessary and burdensome litigation, and supports ingenuity in the market. We have benefited from the clarity and certainty that the 2015 Patent Policy provides. Our experts contribute to use or build to IEEE standards and we share a common interest that standardization activities in IEEE continue to thrive and address the needs to IEEE stakeholders. The 2015 Patent Policy is helping achieve these needs.

At the time of their adoption, the 2015 Updates had support from an overwhelming number of IEEE-SA participants and industry stakeholders. We further note that the enactment of the 2015 Updates followed approvals by super-majorities at multiple levels of the IEEE’s governance hierarchy.

The empirical record demonstrates that the 2015 Patent Policy facilitated unprecedented growth and success for IEEE-SA and its standards. In the years since the policy updates went into effect, ever-increasing evidence demonstrates the benefits of IEEE-SA’s approach, particularly in comparison to other standards-setting organizations such as the European Telecommunications Standards Institute (ETSI):

-Total Technical Contributions to IEEE-SA Standards Increased Since 2015: The research firm IPLytics analyzed technical contributions to the IEEE-SA Standards Association before and after the policy updates and found a clear and consistent increase since the adoption of the policy. After two years of declining technical contributions to IEEE-SA standards in 2013 and 2014, total contributions rebounded after the enactment of the new policy in 2015 and IEEE-SA had a record number in 2017.

In the IEEE-SA 802 working groups, which are responsible for Wi-Fi standards, technical contributions continued to increase after the policy update leading to a record number in 2018. This finding led them to conclude that “patent policy considerations have not been a significant factor in
companies" decisions about whether to invest in and submit technologies to IEEE-SA 802 working groups." Even in the most patent-heavy IEEE-SA 802 working groups, IPLytics found contributions increased in line with total technical contributions to all 802 working groups.

-Uncertainty and Confusion in ETSI FRAND Terms are Responsible for 75 Percent of All SEP Litigation in Past 20 Years: One of the clearest indicators of uncertainty and confusion within contracts and other legal texts is the amount of litigation that they spawn. Litigation over SEPs in digital communications standards like LTE grew exponentially in recent years, more than quadrupling between 2009 and 2017 alone according to analysis from darts-ip.

Additionally, IPLytics analyzed twenty years of worldwide SEP litigation, from 2001-2021, and found that more than 75 percent of that litigation related to 2G, 3G, 4G and 5G standards. Meanwhile, just two percent of SEP litigation during the same time period related to IEEE’s Wi-Fi standards.

-IEEE-SA is Delivering on its Mission and the True Goals of Standardization: Each standards setting organization picks the approach that fits its goals best. Time and time again, the IEEE’s approach proves to be a better approach for delivering on the organization’s standardization goals and the well-established role of technical interoperability standards.

The goal of IEEE’s standards development process, according to its Standards Development Principles, is to develop technical standards that “enable innovation, and open new market opportunities to their users by allowing interoperability of products, services, and processes; and they create ecosystems that promote economies of scale and healthy competition. These attributes are essential to help ensure that markets remain open, allowing consumers to have choice and allowing new entrants to successfully enter markets.” IEEE’s Wi-Fi standards unequivocally meet these goals. Few ecosystems can compare to the dynamic array of companies that build Wi-Fi compatible products. Competition at every level of the Wi-Fi technology industry is fierce, and startups can compete and thrive in the marketplace. Moreover, Wi-Fi is at IoT’s center, and nearly every industry adopted the standard for connecting their products wirelessly to the internet. In 2020 alone, the Wi-Fi Alliance, which drives global Wi-Fi adoption and evolution through thought leadership, spectrum advocacy, and industry-wide collaboration, certified 8752 devices from 306 companies. These numbers, however, downplay the size and scope of the Wi-Fi ecosystem because a significant (and growing) percentage of App Association small business member companies that build Wi-Fi compatible products don’t pursue certification through the Alliance and each device certification can cover thousands or even millions of units.

IEEE’s requirement that SEP holders must license their patents to companies at both the product and component level allows companies with little experience in wireless networking or SEP licensing to integrate Wi-Fi into their products rapidly and seamlessly.

By contrast, the evidence is clear that the public arguments made against the IEEE’s updated policy are without merit. The updates have had no negative effects on participation or contributions of patented technology to IEEE-SA standards and they helped ensure that IEEE’s Standards Association continues to deliver on its mission. The IEEE-SA should put its mission and the standards ecosystem (including the Wi-Fi ecosystem) first and reject the self-serving demands of a few vocal companies seeking to rescind the 2015 Patent Policy for their narrow gains.
### Cons:

Changing the IEEE-SA Patent Policy would not provide any meaningful benefits. Undoing the clarifications made to the Patent Policy in 2015 would simply enable the same SEP abuses (and negative impacts of that abuse) that IEEE-SA already recognized and took successful steps to prevent. Further, changes to the IEEE-SA policy would, by undercutting the certainty it provides, negatively impact participation from App Association members who innovate across a range of industries and have come to rely on its clarity.

**Comments regarding the ongoing use of the Custom LOA form under this option:**

Use of the Custom LOA for IEEE-SA projects initiated prior to March 2015 can be supported. Use of the Custom LOA should not be permitted for other projects, since all parties involved would have been aware of the terms of the IEEE-SA Patent Policy when joining such projects.

### Option ii(a): Remove all of the Patent Policy provisions regarding Prohibitive Orders

#### Pros:

Changing the IEEE-SA Patent Policy would not create any meaningful benefits. Undoing the clarifications made to the Patent Policy in 2015 would simply enable the same SEP abuses effected by SEP holders systematically seeking prohibitive orders despite their FRAND commitments on IEEE-SA standards (and negative impacts of that abuse) that IEEE-SA already recognized and took successful steps to prevent. Consistent with a growing number of enforcement actions by competition regulators and courts across key jurisdictions, removing provisions regarding prohibitive orders from the IEEE-SA Patent Policy would support SEP holders that made a voluntary FRAND commitment being able to refuse to license, or bring an injunction against, a party who is willing to take a license based on FRAND terms, which is exclusionary conduct under antitrust laws. Further, changes to the IEEE-SA policy would, by undercutting the certainty it provides, negatively impact participation from App Association members who have come to rely on its clarity.

#### Cons:

In the context of SEPs, prohibitive orders (injunctions from a district court or exclusion orders from the International Trade Commission) are the opposite of licensing. Their only purpose – except in rare circumstances where court adjudication is not possible – is to hold up those who build or rely on IEEE-SA standards and to pressure those same innovators to agree to supra-FRAND SEP licensing terms. The negative effects of abusive licensing of SEPs can be particularly harmful to App Association members that both hold SEPs and use standards in their products, and do not have the resources to deal with larger enterprises holding numerous SEPs. Without the IEEE-SA Patent Policy's clarifications, we face potential financially debilitating litigation with no predictable outcome or are forced to accept excessive royalty demands made by the SEP holders. In the worst case, we may be forced to change our product, or abandon our business plan altogether, if we cannot afford the litigation or the supra-FRAND SEP licenses. The net result is that consumers lose and innovation is negatively impacted. The current IEEE-SA Patent Policy appropriately recognizes this, and fairly balances the patent owner's ability to seek FRAND compensation against the implementer’s ability to be free from improper “market exclusion” tactics.
Comments regarding the ongoing use of the Custom LOA form under this option:

Use of the Custom LOA for IEEE-SA projects initiated prior to March 2015 can be supported. Use of the Custom LOA should not be permitted for other projects, since all parties involved would have been aware of the terms of the IEEE-SA Patent Policy when joining such projects.

Option ii(b): Remove all optional factors included in the definition of Reasonable Rate

Pros:

Changing the IEEE-SA Patent Policy would not create any meaningful benefits. IEEE-SA’s current Patent Policy provides much needed guidance on what a reasonable rate is in the context of the FRAND commitment (that a reasonable rate for a valid, infringed, and enforceable FRAND-encumbered SEP should be based on the value of the patented invention itself, rather than its inclusion in the standard, real or hypothetical uses of the standard at the end of a value chain, etc.), which has provided certainty to the entire ecosystem, and to App Association members in particular.

Cons:

The IEEE-SA Patent Policy currently provides appropriate clarity and predictability for FRAND licensing. Losing or reducing that clarity would have only negative effects, and would enable SEP owners to engage in abusive holdup and achieve supra-FRAND royalty terms. Since 2015, IEEE-SA’s Patent Policy significantly contributed to avoiding two well-established and deleterious effects: royalty stacking, when the cumulative demands for SEP licenses cascade to make accepting them economically unviable; and patent holdup, where a SEP holder demands supra-FRAND royalties or (other unreasonable requirements) from potential user of the standard, preventing licensing. The clarity provided by IEEE-SA’s Patent Policy is critical to App Association members that count on FRAND access to SEPs, and removing clarifications addressing the definition of a reasonable rate would undermine our ability to participate in IEEE-SA standardization or to compete using standardized technologies.

Comments regarding the ongoing use of the Custom LOA form under this option:

Use of the Custom LOA for IEEE-SA projects initiated prior to March 2015 can be supported. Use of the Custom LOA should not be permitted for other projects, since all parties involved would have been aware of the terms of the IEEE-SA Patent Policy when joining such projects.
Option iii: Offer more options than before by: Allowing an LOA filer the ability to choose whether it may seek or not seek Prohibitive Orders in accordance with the current wording of the Patent Policy; and Clarifying the optionality of the factors included in the definition of Reasonable Rate.

Pros:

Changing the IEEE-SA Patent Policy would not create any meaningful benefits. Undoing the clarifications made to the Patent Policy in 2015 would simply enable the same SEP abuses effected by a small and vocal group of SEP holders systematically seeking prohibitive orders and demanding abusive SEP royalties despite their FRAND commitments on IEEE-SA standards (and negative impacts of that abuse) that IEEE-SA has already recognized and taken successful steps to prevent.

Cons:

As previously noted, injunctions (prohibitive orders) are the opposite of licensing. Their only purpose – except in rare circumstances where court adjudication is not possible – is to hold up implementers of IEEE-SA standards to force them to pay non-FRAND licensing fees. The IEEE-SA Patent Policy appropriately recognizes this, and fairly balances the patent owner’s ability to seek FRAND compensation against the implementer’s ability to be free from improper “market exclusion” tactics. Consistent with a growing number of enforcement actions by competition regulators and courts across key jurisdictions, removing provisions regarding prohibitive orders from the IEEE-SA Patent Policy would support SEP holders that made a voluntary FRAND commitment being able to refuse to license, or bring an injunction against, a party that is willing to take a license based on FRAND terms, which is exclusionary conduct under antitrust laws. Further, changes to the IEEE-SA policy would, by undercutting the certainty it provides, negatively impact participation from small businesses like the App Association’s members that have come to rely on its clarity. IEEE-SA should not create new, separate “options” with respect to prohibitive orders that would allow some IEEE-SA participants to unfairly seek injunctions targeting use of IEEE-SA standards.

The IEEE-SA Patent Policy is already very clear that the optional factors included in the definition of “Reasonable Rate” are, in fact, optional. There is no need to seek further changes to the Patent Policy to clarify what is already clearly stated.

Comments regarding the ongoing use of the Custom LOA form under this option:

Use of the Custom LOA for IEEE-SA projects initiated prior to March 2015 can be supported. Use of the Custom LOA should not be permitted for other projects, since all parties involved would have been aware of the terms of the IEEE-SA Patent Policy when joining such projects.
Option i: No change to the text of the 2015 Patent Policy

Pros:

IEEE standards play an important role in enabling a wide range of communication technologies, in electronic and electrical systems and are now making possible the deployment of emerging technologies such as Artificial Intelligence and applications of Internet of Things (IoT). The current (2015) IEEE Patent Policy provides benefits to electronics manufacturers in developing countries such as those in India. The patent policy provides clarity to manufacturers and reduces the threat of lawsuits designed to increase the bargaining leverage of SEP holders, particularly for small and medium manufacturers and helps ensure that these manufacturers are not forced to pay excessive license fees under the threat of such SEP lawsuits. IEEE’s standards together with its 2015 patent policy help India achieve Prime Minister Modi’s vision of a Digital India, and pursue the “Make In India” initiative, which was established to increase domestic manufacturing capacity including for electronics devices, components and systems.

Cons:

We are not aware of any cons to the IEEE Patent Policy.

Comments regarding the ongoing use of the Custom LOA form under this option:

For manufacturers in developing countries such as India who have limited experience with US laws, custom Letters of Assurance significantly raise the possibility of confusion when interpreting such Letters of Assurance and understanding their implications. A “standardized” Letter of Assurance will provide certainty and clarity to such parties, once they understand what the Letter of Assurance implies. Custom LOAs should not be permitted for standards activities started after the adoption of the 2015 patent policy.

Option ii(a): Remove all of the Patent Policy provisions regarding Prohibitive Orders

Pros:

There are no Pros to removing the provisions in the current Patent Policy against seeking Prohibitive Orders.
Manufacturers in India are increasingly being subject to lawsuits involving SEPs. The current policy provides a reasonable approach of limiting prohibitive orders to only certain circumstances and this ensures that powerful SEP licensors cannot threaten smaller manufacturers with prohibitive orders despite the manufacturer’s willingness to negotiate licenses. Removing the provisions regarding prohibitive orders will take away this important protection and may disproportionately impact and burden small and medium manufacturers.

Comments regarding the ongoing use of the Custom LOA form under this option:

For manufacturers in developing countries such as India who have limited experience with US laws, custom Letters of Assurance significantly raise the possibility of confusion when interpreting such Letters of Assurance and understanding their implications. A “standardized” Letter of Assurance will provide certainty and clarity to such parties, once they understand what the Letter of Assurance implies. Custom LOAs should not be permitted for standards activities started after the adoption of the 2015 patent policy.

Option ii(b): Remove all optional factors included in the definition of Reasonable Rate

Pros:

We see no pros to removing the optional factors in the definition of reasonable rate

Cons:

The optional factors provide important and valuable means of determining a FRAND license fee. Removing these factors will take away an important set of tools that can help ensure that the licensing rates being sought by SEP licensors are truly fair and reasonable and are not disadvantaging small and medium manufacturers.

Comments regarding the ongoing use of the Custom LOA form under this option:

For manufacturers in developing countries such as India who have limited experience with US laws, custom Letters of Assurance significantly raise the possibility of confusion when interpreting such Letters of Assurance and understanding their implications. A “standardized” Letter of Assurance will provide certainty and clarity to such parties, once they understand what the Letter of Assurance implies. Custom LOAs should not be permitted for standards activities started after the adoption of the 2015 patent policy.
Option iii: Offer more options than before by: Allowing an LOA filer the ability to choose whether it may seek or not seek Prohibitive Orders in accordance with the current wording of the Patent Policy; and Clarifying the optionality of the factors included in the definition of Reasonable Rate.

Pros:

We believe there are no pros to offering more options

Cons:

3(i) – As mentioned in our response to 2 (a), the current patent policy already clarifies when prohibitive orders can be sought. We do not believe that IEEE should allow LOA filers the ability to choose whether they may or may not seek prohibitive orders in a manner consistent with current working of the Patent Policy. If permitted, Option 3(i) would cause confusion and would disproportionately impact small and medium manufacturers such as those in India.

3(ii) – resources available on IEEE such as the FAQs and the presentation “Introduction and Guide to the IEEE-SA Patent Policy effective March 15, 2015” available at: [https://mentor.ieee.org/myproject/Public/mytools/mob/patut.pdf](https://mentor.ieee.org/myproject/Public/mytools/mob/patut.pdf) is a very useful resource about the optionality of factors.

Comments regarding the ongoing use of the Custom LOA form under this option:

For manufacturers in developing countries such as India who have limited experience with US laws, custom Letters of Assurance significantly raise the possibility of confusion when interpreting such Letters of Assurance and understanding their implications. A “standardized” Letter of Assurance will provide certainty and clarity to such parties, once they understand what the Letter of Assurance implies. Custom LOAs should not be permitted for standards activities started after the adoption of the 2015 patent policy.
Option i: No change to the text of the 2015 Patent Policy

Pros:

Cons:

Huawei supports reversing the text of the 2015 patent policy, and supports returning to the 2007 patent policy, for reasons discussed regarding options ii(a) and ii(b).

Comments regarding the ongoing use of the Custom LOA form under this option:

Option ii(a): Remove all of the Patent Policy provisions regarding Prohibitive Orders

Pros:

In line with the neutrality principle, the standards-setting organization should not alter the balance—that has evolved through decades of licensor-versus-licensee litigation in many jurisdictions across the world—between the licensor and licensee with the provision regarding Prohibitive Orders, even when the licensee is unwilling to negotiate for reasonable terms. In addition, SSO rules for whether to issue a prohibitive order are inappropriate and unnecessary because the question is adequately resolved judicially. For example, Huawei v ZTE (case C-170/13) and Huawei v Samsung (case (2016) Yue 03 Min Chu No. 1382, Shenzhen Intermediate People’s Court) both describe reasonable rules for issuing a prohibitive order in the presence of FRAND commitments. Due to the biased provision regarding Prohibitive Orders, a noticeable number of essential patent holders have chosen negative letters of assurance (LOAs) under the terms of the 2015 patent policy. These negative LOAs undermine the effectiveness of the IPR policy, and negatively impact the related IEEE standards. For example, in ISO/IEC JTC1/SC6’s 60-day ballot on IEEE 802.11ax-2021 as the first part of an approval process defined by the PSDO agreement between IEEE SA and ISO, four national bodies submitted comments on existing negative Letters of Assurance to IEEE SA in relation to 802.11ax, where three out of those four national bodies voted disapproval in the ballot. Therefore, it is beneficial for the IEEE SA to focus on innovation and ensure the opportunity to pursue technology and market advancement, while also promoting implementer and consumer interest in deploying needed technology for "humanitarian benefit".

Source URL: https://grouper.ieee.org/groups/pp-dialog/email/msg00698.html
Cons:

Comments regarding the ongoing use of the Custom LOA form under this option:

The custom LOA form should be permitted. We support use of the Custom LOA form for standards projects initiated even after the effective date of the 2015 Patent Policy.

Option ii(b): Remove all optional factors included in the definition of Reasonable Rate

Pros:

The controversial provision regarding the definition of Reasonable Rate goes against the neutrality principle that the IEEE as a standards-setting organization (SSO) should follow. In addition, an SSO definition of a Reasonable Rate is inappropriate and unnecessary because it is adequately resolved judicially. For example, HTC v. Ericsson (case: 19-40566) and China’s NDRC Administrative Sanction Decision No. 1 [2015](Mar. 2, 2015) both show judicial bodies determining Reasonable Rates for SEP patents. Due to the biased provision regarding the definition of Reasonable Rate, a noticeable number of essential patent holders have chosen negative LOAs under the terms of the 2015 patent policy. These negative LOAs negatively impact IEEE standards development and the effectiveness of its IPR policy. Therefore, it is beneficial for the IEEE SA to focus on innovation to promote implementer and consumer interest in deploying needed technology for “humanitarian benefit”.

Cons:

Comments regarding the ongoing use of the Custom LOA form under this option:

The custom LOA form should be permitted. We support use of the Custom LOA form for standards projects initiated even after the effective date of the 2015 Patent Policy.

Option iii: Offer more options than before by: Allowing an LOA filer the ability to choose whether it may seek or not seek Prohibitive Orders in accordance with the current wording of the Patent Policy; and Clarifying the optionality of the factors included in the definition of Reasonable Rate.

Pros:

Cons:
Comments regarding the ongoing use of the Custom LOA form under this option:
Option i: No change to the text of the 2015 Patent Policy

Pros:

Cons:

Comments regarding the ongoing use of the Custom LOA form under this option:

Option ii(a): Remove all of the Patent Policy provisions regarding Prohibitive Orders

Pros:

Cons:

The 2015 IEEE policy seeks to operationalize a simple principle - implementers are entitled to an adjudication of Reasonable Rates before SEP owners can seek a Prohibitive Order. From an economic standpoint, this is a sound policy. Royalties negotiated when implementers face a credible threat of exclusion from the product market will reflect not only the value of the standard, but also the value of many other unrelated components and downstream innovations. The policy is also quite clear that if implementers refuse to participate in or comply with the outcome of a rate-setting adjudication, Prohibitive Orders remain available.

Comments regarding the ongoing use of the Custom LOA form under this option:
Option ii(b): Remove all optional factors included in the definition of Reasonable Rate

Pros:

Cons:
The optional factors provide useful guidance for understanding how to assess whether rates are reasonable. In particular, it is helpful to (i) focus our attention on the claimed feature, (ii) understand how individual SEPs create value within a larger system that can encompass many other patented and unpatented features, and (iii) recognize that rates negotiated in the shadow of a Prohibitive Order are not necessarily reasonable. Removing the optional factors from the policy obscures these principles.

Comments regarding the ongoing use of the Custom LOA form under this option:

Option iii: Offer more options than before by: Allowing an LOA filer the ability to choose whether it may seek or not seek Prohibitive Orders in accordance with the current wording of the Patent Policy; and Clarifying the optionality of the factors included in the definition of Reasonable Rate.

Pros:

If the factors included in the definition of a Reasonable Rate are meant to be optional, then I agree that the language of the 2015 policy could more clear.

Cons:

Allowing an LOA filer to choose whether it will seek Prohibitive Orders neuters an economically substantive part of the policy. As I noted in response to point ii(a), access to Prohibitive Orders leads to royalties that predictably incorporate value not linked to the SEP(s). The current policy clarifies the type of bargaining environment that is likely to generate Reasonable Rates --- one backstopped by enforceable adjudication as opposed to threats of exclusion from downstream product markets. The fact that some courts have already placed restrictions on access to Prohibitive Orders for (F)RAND encumbered SEPs is no reason for IEEE to change its own policy, particularly where such a change might be viewed as backing away from the underlying economic principle.

Comments regarding the ongoing use of the Custom LOA form under this option:
Option i: No change to the text of the 2015 Patent Policy

Pros:

Dell provides the essential infrastructure for organizations to build their digital future, transform IT and protect their most important asset, information. In fiscal year FY21, Dell recorded annual revenues of $94.2 billion, and spent over $5 billion in research and development. Dell holds thousands of granted patents and pending patent applications (including SEPs). Dell is also an active member of the IEEE.

Maintaining the terms of the IEEE Patent Policy is important to the success of IEEE standards and the protection of competition and fair-play involving IEEE implementations. The IEEE’s standard setting activities have thrived under the current IEEE Patent Policy. The Patent Policy fairly balances the interests of SEP holders and users of IEEE standards.

Dell notes the U.S. Department of Justice (DOJ) recently set forth its approach to SSO patent policies and the IEEE Patent Policy (https://www.justice.gov/opa/speech/antitrust-division-economics-director-enforcement-jeffrey-wilder-iam-and-gcr-connect-sep). Dell submits that the DOJ’s current approach is a return to the traditional SEP policies that have guided US law for decades, and which were expressed by the DOJ in its 2015 Business Review Letter to IEEE. The DOJ stated, among other things, that going forward it “will support (and not discourage) SDOs in their efforts to adopt IPR policies that address licensing inefficiencies and enable the dissemination of standardized products to consumers.” And addressing the IEEE even more expressly, the DOJ noted, “When IEEE further defined participants’ licensing obligations in 2015, the Division concluded that revisions to IEEE’s patent policy had ‘the potential to benefit competition and consumers by facilitating licensing negotiations, mitigating hold up and royalty stacking, and promoting competition among technologies for inclusion in standards.’” Dell agrees with the DOJ that the 2015 policy benefits consumers and promotes competition, and therefore should be maintained.

Cons:

There are no cons to maintaining the IEEE Patent Policy.

Comments regarding the ongoing use of the Custom LOA form under this option:

[Blank]
Option ii(a): Remove all of the Patent Policy provisions regarding Prohibitive Orders

Pros:
None

Cons:

The use of prohibitive orders against IEEE standards would be detrimental for IEEE participants and for consumers. SEP prohibitive orders will interfere with the use and promulgation of IEEE standards; especially when SEP holders are entitled to seeking FRAND compensation via other means. The IEEE Patent Policy correctly balances the interest of SEP holders and users of IEEE standards. If IEEE standards become subject to prohibitive orders, companies may choose to avoid IEEE standards in favor of other alternative technologies.

Comments regarding the ongoing use of the Custom LOA form under this option:

Option ii(b): Remove all optional factors included in the definition of Reasonable Rate

Pros:
None

Cons:

The applicability and impact of all of the factors relating to a reasonable rate should be carefully considered in every circumstance. Full consideration is important to developing a point of view on a rate that balances the public policy of encouraging and promoting adoption and implementation of standards against reasonable and non-discriminatory royalties for patent holders.

Comments regarding the ongoing use of the Custom LOA form under this option:

Option iii: Offer more options than before by: Allowing an LOA filer the ability to choose whether it may seek or not seek Prohibitive Orders in accordance with the current wording of the Patent Policy; and Clarifying the optionality of the factors included in the definition of Reasonable Rate.

Pros:
None
Cons:

<table>
<thead>
<tr>
<th>Comments regarding the ongoing use of the Custom LOA form under this option:</th>
</tr>
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<tbody>
<tr>
<td>IEEE should not create approaches supporting prohibitive orders against IEEE standards for the reasons stated in response to Option ii (a).</td>
</tr>
</tbody>
</table>
Option i: No change to the text of the 2015 Patent Policy

Pros:

The IEEE Patent Policy is a key enabler for the IEEE standards ecosystem. Juniper supports maintaining the current Patent Policy text. The text fairly addresses the interests of both patent holders (including Juniper) and users of IEEE standards, and promotes consumer interests and widespread promulgation of and investment in IEEE standards. The Patent Policy also provides clarity in the marketplace, reduces disputes, and protects against abusive behaviors.

Juniper is a leading provider of infrastructure, connectivity and cloud solutions, including solutions using IEEE standards. We have significant experience with SEP issues, and our experience is that the IEEE Patent Policy has provided these significant benefits. We do not see any reason to forego those benefits going forward.

Cons:

There are no "cons" to maintaining the current IEEE Patent Policy.

Comments regarding the ongoing use of the Custom LOA form under this option:

Juniper agrees that projects initiated prior to the Patent Policy’s approval could use the Custom LOA, but does not agree that the Custom LOA should be available for subsequent projects.

Option ii(a): Remove all of the Patent Policy provisions regarding Prohibitive Orders

Pros:

There would be no benefits to changing the current IEEE Patent Policy.
SEP injunction demands are not appropriate in most circumstances. The Patent Policy correctly restricts their use, and clarifies that they can be available only in certain circumstances where necessary to truly protect the SEP owner’s interests to obtain RAND compensation. In Juniper’s experience, SEP injunctions are used primarily as a tool to extract non-RAND compensation. The Patent Policy’s lack of tolerance with such behaviors has benefitted the IEEE standards ecosystem.

Deleting the Patent Policy’s text regarding Prohibitive Orders would only create and encourage disputes, and associated efforts to obtain non-RAND licenses. The market benefits from the clarity and certainty the Patent Policy provides, and companies can more readily invest in development of IEEE-compliant devices. IEEE should not undermine this situation by deleting the Patent Policy’s text regarding Prohibitive Orders.

Comments regarding the ongoing use of the Custom LOA form under this option:

Juniper agrees that projects initiated prior to the Patent Policy’s approval could use the Custom LOA, but does not agree that the Custom LOA should be available for subsequent projects.

Pros:

Option ii(b): Remove all optional factors included in the definition of Reasonable Rate

There would be no benefits to changing the current IEEE Patent Policy.

Cons:

Juniper supports the Patent Policy’s text regarding Reasonable Rates. Having clarity and direction to evaluate Reasonable Rates benefits license negotiations, and facilitates resolutions. Deleting the text regarding the optional factors would reduce create uncertainty and incentivize licensing demands. IEEE would not benefit from such an approach.

Comments regarding the ongoing use of the Custom LOA form under this option:

Juniper agrees that projects initiated prior to the Patent Policy’s approval could use the Custom LOA, but does not agree that the Custom LOA should be available for subsequent projects.

Option iii: Offer more options than before by: Allowing an LOA filer the ability to choose whether it may seek or not seek Prohibitive Orders in accordance with the current wording of the Patent Policy; and Clarifying the optionality of the factors included in the definition of Reasonable Rate.

Pros:

There would be no benefits to changing the current IEEE Patent Policy.
Cons:

As discussed above, IEEE should not facilitate a situation where Prohibitive Orders would be more readily available as against IEEE standards and standardized devices. Permitting parties to “pick and choose” whether they might wish to be bound by the limitations on Prohibitive Orders is not a viable option, and would undermine the benefits of the Patent Policy. There are no benefits to such an approach.

There also is no benefit from, or need to, “clarify” what is already stated in the Patent Policy. The optionality of the factors included in the definition of Reasonable Rate is already clear and express. As such, we do not support that IEEE might need to revise the Patent Policy to yet again address this issue.

Comments regarding the ongoing use of the Custom LOA form under this option:

Juniper agrees that projects initiated prior to the Patent Policy’s approval could use the Custom LOA, but does not agree that the Custom LOA should be available for subsequent projects.
Option i: No change to the text of the 2015 Patent Policy

Pros:

I see no pros under this option for IEEE-SA as a standards development organization nor for IEEE-SA standards.

Cons:

I have been a standards policy professional for decades, and also worked as a Vice President of ANSI. My many years of experience have taught me that successful standard development organizations are ones that adopt consensus, balanced, business-model-neutral IPR policies.

The best practices established by the Global Standards Collaboration (“GSC”), of which IEEE is a member, similarly embrace principles that “strongly support the adoption of effective intellectual property policies that are transparent, widely accepted and encourage broad-based participation and the contribution of valuable technical solutions by respecting intellectual property rights, including the right of the intellectual property holder to receive reasonable and adequate compensation for the shared use of its technology” https://www.itu.int/dms_pub/itu-t/oth/21/05/T2105000011002200MSWE.doc

The world’s leading SDOs follow these principles. See, for example, ETSI Director General’s public statement on IPR Policy (December 3, 2018) https://www.etsi.org/newsroom/news/1458-etsi-director-general-issues-public-statement-on-ipr-policy (“ETSI has a tradition of neutrality and this is one of the reasons industry comes to us. We want to keep it this way for the benefit of all”)

The responses to this call for comments, as well as similar exchanges and responses since the revision of IEEE’s patent policy began through a controversial process eight and half years ago, demonstrate that the IEEE’s 2015 patent policy is antithetical to all these principles: It was developed without consensus; it is not “widely-accepted”; and it caters to the commercial interests of one group of stakeholders (the same ones who developed it in closed doors around 2013-2014). Even supporters of the 2015 policy recognize that there is fierce opposition to it and admit that it plays to their commercial interests. However, I have not seen any credible data points that suggest the policy has been beneficial to IEEE-SA, all of its members, or its standards. To the contrary, I have seen many, many, Negative Letters of Assurance (“LOAs”) from companies with newer technologies who do not like the 2015 policy and thus the lack of the newer technologies in IEEE standards devalues those standards compared to other standards since the IEEE standards lack the newer technologies.
Comments regarding the ongoing use of the Custom LOA form under this option:

I find it confusing and bad policy to have two types of LOAs that are very different apply at the same time. Removal of the 2015 patent policy changes will obviate the need for the Custom LOA.

**Option ii(a): Remove all of the Patent Policy provisions regarding Prohibitive Orders**

**Pros:**

Removal of the Patent Policy provisions regarding Prohibitive Orders would be helpful because it removes some of the problematic 2015 policy elements that have disserved IEEE, and would also bring the IEEE patent policy in line with patent laws.

**Cons:**

I see no cons to removing all Prohibitive Orders language throughout the 2015 patent policy

Comments regarding the ongoing use of the Custom LOA form under this option:

I find it confusing and bad policy to have two types of LOAs that are very different apply at the same time. Choosing option iia and iib may obviate the need for the Custom LOA altogether - this would be ideal for IEEE-SA.

**Option ii(b): Remove all optional factors included in the definition of Reasonable Rate**

**Pros:**

Removal of the Reasonable Rate provisions would be helpful because it removes some of the problematic 2015 policy elements that have disserved IEEE, and would also bring the IEEE patent policy in line with patent laws.

**Cons:**

I see no cons to removing the Reasonable Rate language.

Comments regarding the ongoing use of the Custom LOA form under this option:

I find it confusing and bad policy to have two types of LOAs that are very different apply at the same time. Choosing options iia and iib may obviate the need for the Custom LOA altogether - this would be ideal for IEEE-SA.
Option iii: Offer more options than before by: Allowing an LOA filer the ability to choose whether it may seek or not seek Prohibitive Orders in accordance with the current wording of the Patent Policy; and Clarifying the optionality of the factors included in the definition of Reasonable Rate.

**Pros:**

I see no pros under this option to IEEE-SA or its standards.

**Cons:**

The ability to seek Prohibitive Order is the default. This option turns the situation on its head.

Comments regarding the ongoing use of the Custom LOA form under this option:
Option i: No change to the text of the 2015 Patent Policy

Pros:

***Introduction***

Apple strongly supports making no changes to the 2015 Patent Policy for at least the following six reasons.

First, the 2015 Patent Policy responded to a demonstrated need for greater clarity at IEEE about the nature of its reasonable and non-discriminatory (RAND) commitment in order to support widespread participation in and adoption of IEEE standards. That need continues. Changing the policy as proposed would cause mass confusion and likely lead to a dramatic increase in IEEE-related standard-essential patent (SEP) litigation, which today is significantly less than litigation of cellular SEPs.

Second, the clarity and certainty that the 2015 Patent Policy provides have supported (and in no way diminished) greater activity and innovation at IEEE, both in the quantity of standardization activity as well as in work on cutting-edge standards, improving the pace and quality of IEEE standards.

Third, the Department of Justice (DOJ) positively reviewed the 2015 Patent Policy before it was adopted and highlighted a range of benefits that could result from the policy updates. Despite a brief deviation by the previous administration in 2020, when it departed from the long-held consensus that SEPs pose a holdup risk—DOJ has reaffirmed its 2015 review of IEEE’s Patent Policy.

Fourth, the 2015 Patent Policy was properly adopted through a careful, deliberative process, following IEEE rules and procedures, and reflects the views of a large cross-section of IEEE members.

Fifth, the Policy appropriately limits the availability of injunctive relief and so remains consistent with the view among courts, regulators, and academics that injunctions for SEPs should be limited because of the holdup concerns they present.

Sixth, the Policy’s inclusion of three recommended factors for consideration in determining a Reasonable Rate also accurately reflects the law regarding determining RAND royalties.

In offering these comments, Apple provides a balanced perspective based on our extensive experience as a SEP licensor, SEP licensee, and standards contributor. We are an active participant in and contributor to IEEE standards, and are widely recognized as one of the world’s leading innovators. We follow RAND principles in licensing our own substantial SEP portfolio, and we have a long history of respecting the intellectual property rights of others and taking voluntary SEP licenses when appropriate, reasonable and non-discriminatory.

***IEEE Properly Responded To The Continued Need For Clarity In IPR Policies***
The updates to the 2015 Patent Policy were based on the well-recognized need for standards developing organizations (SDOs) in general, and IEEE in particular, to provide greater clarity about RAND licensing commitments. That need continues today and would be substantially magnified if IEEE were to backtrack on its 2015 clarifications. As IEEE explained to DOJ when requesting review of the updated policy, the changes made to its 2007 Policy were “insufficient to deal with the broad problem of uncertainty over the meaning of ‘reasonable rates’ for SEPs.” IEEE Request for Business Review Letter at 10 (Sept. 30, 2014), https://tinyurl.com/b7vcrtc. IEEE further explained that the proposed policy updates provided greater clarity on several issues including providing a framework on reasonable rates to “better enable parties to reach agreement … (or, failing agreement, … courts)” and limiting the availability of probative orders because “negotiations should be based on the value of the patent, not the value of excluding an implementer from implementing the standard.” Id. at 16, 18.

IEEE also explained that harms from the lack of clarity in IEEE’s 2007 Policy were affecting “consumers and other users of products that implement IEEE standards,” and not just manufacturers using the standards and SEP holders. Id. at 11. For example, Innovatio IP Ventures, LLC sought to take advantage of uncertainty about RAND royalties through a campaign of suing “numerous coffee shops, hotels, restaurants, supermarkets, large retailers, transportation companies, and other commercial users of wireless internet technology” on patents claimed to be essential to the 802.11 standard. In re Innovatio IP Ventures, LLC Patent Litig., No. 11 C 9308, 2013 WL 5593609, at *1 (N.D. Ill. Oct. 3, 2013). It sought royalties of up to $5,000 per location in its litigation. Notice of Entry of Default Judgment, id. (N.D. Ill. Feb. 7, 2013), ECF No. 571 (requesting $5,000 in default damages award from a hotel). Ultimately, through application of a RAND damages model that used the profit margin of a Wi-Fi chip as the royalty base, the court determined that RAND royalties for Innovatio’s patents were only 9.6 cents per chip. 2013 WL 5593609, at *45.

The need for clarity in IPR policies on prohibitive orders was substantial as well. Companies that had voluntarily committed to RAND licensing for their SEPs were seeking prohibitive orders against users of standards, thus imposing the great threat of losing the ability to continue to use the standard. See Case AT.39985—Motorola—Enforcement of GPRS Standard Essential Patents, Comm’n Decision ¶¶ 312-321 (Apr. 29, 2014), https://tinyurl.com/rz9uewee; Complaint ¶¶ 25-27, In re Motorola Mobility LLC, FTC Docket No. C-4410 (July 24, 2013), https://tinyurl.com/v5p9sdwh.

This need for clarity continues today. IEEE’s policy provides a critical bulwark against prohibitive orders on RAND-encumbered SEPs, which certain companies continue to seek despite their hold-up effects and the limits set by courts and governments. See, e.g., Certain UMTS and LTE Cellular Communications Modules and Products, Inv. No. 337-TA-1240 (Jan. 19, 2021) (Notice of Institution of Investigation), http://www.itcblog.com/images/NOI_1240.pdf. Similarly, the 2015 Patent Policy’s explicit text on reasonable rates helps to both maintain and guide RAND rate determinations for SEPs on IEEE standards. As DOJ recently noted, “SDOs are well situated to provide clarity and resolve some of the bottlenecks in FRAND licensing.” Jeffrey Wilder, Econ. Dir. of Enf’t, Antitrust Div., U.S. Dep’t of Justice, Leveling the Playing Field in the Standards Ecosystem: Principles for A Balanced Antitrust Enforcement Approach to Standards-Essential Patents at 10 (Sept. 29, 2021), https://tinyurl.com/mtcss6kw (“2021 Wilder DOJ Speech”). The 2015 Patent Policy does precisely that: providing clarity and resolving potential bottlenecks in RAND licensing for IEEE’s standards that would otherwise exist absent the policy.

***The 2015 Patent Policy’s Improved Clarity Has Supported Activity and Innovation***

The clarity created by the adoption of the 2015 Patent Policy has supported (not diminished) greater activity and innovation at IEEE, including the pace and quality of IEEE standards. As an example, the number of New Project Authorization Requests (“PARs”) reported by the IEEE-SA New Standard
Committee ("NesCom") has increased significantly since the adoption of the 2015 Patent Policy. A September 27, 2018, NesCom Report reflects that there were 79 New PARs in 2014, when the 2007 Patent Policy was in effect. NesCom Report to the SA Standards Board at 5 (Sept. 27, 2018), https://tinyurl.com/f9et92yx. That number has climbed in each subsequent year. In 2020, there were 203 New PARs, more than 2.5 times more than in 2014. NesCom Report at 5 (Mar. 25, 2021), https://tinyurl.com/yj9pumfv. Similarly, a 2019 study found that "the number of technical contributions submitted in IEEE 802 working groups has continued to increase since the IEEE patent policy updates, and was in 2018 at the highest level in IEEE’s history." IPLytics, Empirical Analysis of Technical Contributions to IEEE 802 Standards at 2 (Jan. 2019), https://tinyurl.com/2myt23wh.

In addition to increasing its volume of work, IEEE-SA has undertaken new cutting-edge standards activities since the adoption of the 2015 Patent Policy. For instance, the IEEE P7000 series in artificial intelligence is establishing the foundations for ethics, trustworthiness, and confidence in AI systems. IEEE’s ultra wide band (UWB) standards, such as IEEE 802.15.4z, enable further innovation through digital keys, access control tools, and in-car payments applications, providing consumers with greater choice and convenience. Next generation UWB in IEEE 802.15.4a and .4b will result in innovations in smart buildings and smart traffic management. Further, IEEE 1013-2019 is making the integration of batteries with clean energy sources possible while considering safety, while IEEE 802.11p provides the framework for the European standard for vehicular communication in ETSI ITS-G5.802.11p, used to enable connectivity between public vehicles while providing Wi-Fi access to passengers using public transportation.

In the Internet of Things (IoT), IEEE 2413-2019 specifies the architectural framework for the IoT, and IEEE P2510 provides confidence in the operation of IoT systems by defining quality measures, controls, parameters, and definitions for sensor data in IoT implementations. And in wireless connectivity technology IEEE 802.11ax, marketed as Wi-Fi 6, improves Wi-Fi coverage in dense areas and enables faster speeds. Commercial deployments of this technology are well underway around the world. The clarity of the 2015 Patent Policy contributes to IEEE being a preferred venue for standard setting activities shaping the swiftly changing technological landscape.

The improved clarity from IEEE’s 2015 Patent Policy also benefits private parties in negotiating RAND royalties. The 2015 Patent Policy provides more information for parties to consider when determining RAND royalties and thus helps establish more common ground for negotiations. Parties negotiate in the shadow of the law, and having further guidance from IEEE about how to determine a Reasonable Rate helps to facilitate resolution and avoid protracted litigation. And, if negotiations fail, courts will benefit from having more explicit text on Prohibitive Orders and detailed guidance from IEEE on relevant factors for determining RAND royalties. IEEE and its members are well-placed to define what specific factors may be relevant to RAND royalties for IEEE-SA’s own standards.

Not surprisingly, the improved clarity of the 2015 Patent Policy appears to have helped minimize litigation of IEEE SEPs as compared to SEPs for other standards. Cellular SEPs provide a striking contrast, where the relevant SDOs have declined calls to clarify more explicitly their licensing commitments. Cellular SEPs have accounted for about 76% of the SEPs litigated over time. Tim Pohlmann, SEP Litigation Trends: What Does the Data Say, IPWatchdog (Apr. 28, 2021), https://tinyurl.com/y3xtuf5t. By contrast, Wi-Fi SEPs account for only approximately 2% of litigated SEPs. Id. This divergence illustrates DOJ’s prediction in 2015 that “[b]y bringing greater clarity to the IEEE RAND Commitment, the Update has the potential to facilitate and improve the IEEE-SA standards-setting process,” including by “provid[ing] participants in IEEE-SA standards-setting processes with better ex ante knowledge about licensing terms, potentially broadening ex ante competition among technologies for inclusion in a standard” and by “facilitat[ing] both ex ante and ex post licensing negotiations, and reduc[ing] patent infringement litigation.” Business Review Letter to IEEE at 6 (Feb. 2, 2015), https://tinyurl.com/3mnhmy56 (“2015 DOJ Letter”).
*** DOJ Positively Reviewed The 2015 Patent Policy And Has Recently Confirmed That Its Criticism Of The Policy During The Previous Administration Was An Aberration ***


DOJ has since reaffirmed its original 2015 DOJ Letter, and distanced its views from those expressed in the 2020 Delrahim Letter. In April 2021, DOJ reclassified that 2020 letter as advocacy – severing any implication that it provided formal guidance. 2021 Wilder DOJ Speech at 11. Furthermore, in September 2021, DOJ explained that it will henceforth “support (and not discourage) SDOs in their efforts to adopt IPR policies that address licensing inefficiencies.” Id. at 5.

Indeed, DOJ quoted from the 2015 DOJ Letter with approval, stating that when DOJ reviewed the policy in 2015, it concluded that the revision “had ‘the potential to benefit competition and consumers by facilitating licensing negotiations, mitigating holdup and royalty stacking, and promoting competition among technologies for inclusion in standards.’” Id. at 11 (footnotes omitted). DOJ explained that the 2020 Delrahim Letter may have “shaken confidence in the business-review process and deterred efforts by SDOs to promote best practices.” Id. at 11. “That is why the Department acted this past April and removed the 2020 supplemental competition advocacy from IEEE’s 2015 review file,” appropriately relocating the Delrahim Letter to its webpage with historical records of its comments and advocacy. Id.

*** DOJ’s Shift In Position Was Based on Policy Preference, Not Any Change In The Law ***

DOJ’s shift in position under AAG Delrahim was based on policy preferences, not any change in the law or sound economics. Indeed, President Biden has called for broad reconsideration of the federal government’s “position on the intersection of the intellectual property and antitrust laws” in order “[t]o avoid the potential for anticompetitive extension of market power beyond the scope of granted patents, and to protect standard-setting processes from abuse.” Exec. Order No. 14,036, “Promoting Competition in the American Economy,” 86 Fed. Reg. 36,987, 36,991 (July 9, 2021).

At the center of this reconsideration is the joint 2019 DOJ-NIST-PTO Policy Statement that formed the basis of much of the 2020 Delrahim Letter. See U.S. Dep’t of Justice, U.S. Pat.& Trade Off., and Nat’l Inst. of Standards and Tech., Policy Statement on Remedies for Standards-Essential Patents Subject to Voluntary F/RAND Commitments (Dec. 19, 2019), https://tinyurl.com/3mt9jbm4 (“2019 DOJ-NIST-PTO Policy Statement”). DOJ has conceded that “[t]he 2019 statement has been criticized as favoring patent holders and promoting the use of injunctions or ITC exclusion orders to remedy SEP infringement.” 2021 Wilder DOJ Speech at 9. Accordingly, DOJ no longer stands by the 2019 statement. Rather, it “plans to work in partnership with USPTO and NIST and consult with the [Federal Trade Commission] on how best to respond to the Executive Order’s call for a more procompetitive and balanced policy.” Id. at 10. Further, the joint 2019 DOJ-NIST-PTO Policy Statement does not rely on any law regarding SEPs not available to DOJ in 2015. See generally 2019 DOJ-NIST-PTO Policy Statement.

In addition, none of the few additional cases cited in the 2020 Delrahim Letter reflect a change in the law from the 2015 DOJ Letter. First, the additional cases do not reflect a change in the law about the
many limits on injunctions or the holdup risk from SEPs. The 2020 Delrahim Letter without any basis or evidence asserted that "concerns over hold-up as a real-world competition problem have largely dissipated." 2020 Delrahim Letter at 4. In support of this assertion, it discussed Microsoft Corp. v. Motorola, Inc. as an example of courts "analyze[ing] essential patents the same as they would other patents." 2020 Delrahim Letter at 5 & n.21. But, in that case, the Ninth Circuit affirmed the jury’s finding that Motorola breached its duty of good faith and fair dealing under its RAND commitments by seeking an injunction against Microsoft. 795 F.3d 1024, 1045-47 (9th Cir. 2015). Because Microsoft had asked a court to determine what RAND royalties it should pay Motorola, "the jury could have inferred that Motorola's real motivation [in seeking injunctions] was to induce Microsoft to agree to a license at a higher-than-RAND rate." Id. at 1046. In doing so, the court confirmed the long-held view that injunctions pose a threat of SEP holdup. Moreover, DOJ has now acknowledged the error of former AAG Delrahim’s claim that competition law is inapplicable to SEPs, concluding that “[a]ntitrust law ensures that the standard-setting process cannot be undermined by deceptive FRAND promises or other strategies that harm competition.” 2021 Wilder DOJ Speech at 6-8.

Second, the additional cases cited in the 2020 Delrahim Letter do not reflect a change in the law on determining RAND royalties. In particular, former AAG Delrahim claimed that in 2015 the law on setting FRAND royalties was “generally undeveloped” and that, since 2015, “the case law on FRAND and patent damages has developed to include various means of determining royalties and damages.” 2020 Delrahim Letter at 6. But none of the cases cited to support this contention suggests that using the Smallest Saleable Patent Practicing Unit (SSPPU) is improper. They merely provide that there may be multiple ways to determine royalties. Indeed, AAG Delrahim explicitly conceded that one of the cases he cited, Exmark Mfg. Co. v. Briggs& Stratton Power Prod. Grp., LLC, 879 F.3d 1332, 1348 (Fed. Cir. 2018), acknowledges that an appropriate means to calculate damages is “using the SSPPU as a royalty base,” id. at 7. Likewise, in FTC v. Qualcomm Inc., 969 F.3d 974 (9th Cir. 2020), the Ninth Circuit addressed whether a complex set of business practices involving chip supply as well as SEP licensing violated the antitrust laws. It did not hold that use of the SSPPU is an improper royalty base for determining RAND royalties. The 2015 Patent Policy, which does not mandate solely using the “smallest saleable Compliant Implementation” to determine a Reasonable Rate, is entirely consistent with current law.

As a result, instead of being supported by any developments in the law, DOJ’s shift in position under the previous Administration simply favored the interests of aggressive SEP holders. Indeed, the September 2021 DOJ speech was pointedly titled “Leveling the Playing Field in the Standards Ecosystem: Principles for A Balanced Antitrust Enforcement Approach to Standards-Essential Patents.” 2021 Wilder DOJ Speech at 1.

***The 2015 Patent Policy Was Properly Adopted***

The changes to the 2015 Patent Policy were properly adopted through a deliberative process that afforded all stakeholders an opportunity to express their views. The Ad Hoc committee responsible for preparing the updated Patent Policy solicited extensive public feedback. The IEEE-SA Standards Board conducted an open session to solicit additional feedback, and then voted 14-5 to recommend that IEEE-SA Board of Governors approve the Policy. Both the Board of Governors and the Board of Directors cast super-majority votes in favor of its adoption.

DOJ thoroughly reviewed claims that the process was flawed and concluded that “the overall process afforded considerable opportunity for comment on and discussion of the Update.” 2015 DOJ Letter at 7-8. Moreover, the American National Standards Institute has twice rejected requests from these SEP licensors not to re-accredit IEEE as an ANSI-accredited SDO.

***The 2015 Patent Policy Appropriately Limits The Availability Of Injunctive Relief For SEPs***
The 2015 Patent Policy’s incorporation of provisions explicitly limiting the ability of SEP owners to seek Prohibitive Orders reflected—and continues to reflect—the consensus view among courts, regulators, and academics that injunctions for SEPs subject to a voluntary RAND licensing commitment should be limited. In Microsoft Corp. v. Motorola, Inc., for example, the Ninth Circuit recognized that a RAND commitment limits a SEP holder’s ability to seek an injunction: “Implicit in such a sweeping promise is, at least arguably, a guarantee that the patent-holder will not take steps to keep would-be users from using the patented material, such as seeking an injunction, but will instead proffer licenses consistent with the commitment made.” 696 F.3d 872, 884 (9th Cir. 2012); see also Apple Inc. v. Motorola, Inc., 757 F.3d 1286, 1332 (Fed. Cir. 2014) (observing that a “patentee subject to FRAND commitments may have difficulty establishing irreparable harm under the eBay standard for injunctive relief and that Motorola was not entitled to an injunction because, among other reasons, ‘Motorola’s FRAND commitments, which have yielded many license agreements encompassing the ‘898 patent, strongly suggest that money damages are adequate to fully compensate Motorola for any infringement’), overruled on other grounds by Williamson v. Citrix Online, LLC, 792 F.3d 1339 (Fed. Cir. 2015); Realtek Semiconductor Corp. v. LSI Corp., 946 F. Supp. 2d 998, 1006 (N.D. Cal. 2013) (“[T]he act of seeking injunctive relief . . . is inherently inconsistent and a breach of defendants’ promise to license the patents on RAND terms”).

Competition regulators have concluded that SEPs pose a holdup risk. In approving the 2015 Patent Policy, DOJ echoed the Ninth Circuit’s language from Microsoft v. Motorola: “Inherent in … a RAND commitment is a pledge to make licenses available to those who practice such essential patent claims as a result of implementing the standard—in other words, not to exclude these implementers from using the standard unless they refuse to take a RAND license.” 2015 DOJ Letter at 9. The FTC has brought and settled enforcement actions against SEP licensors seeking injunctions against potential licensees who had expressed an interest in taking a license. The FTC explained that doing so “will harm consumers by either excluding products from the market … or by leading to higher prices because manufacturers using [the] SEPs would be forced, by the threat of an injunction, to pay higher royalty rates which would be passed on to consumers.” Complaint ¶ 3, In re Motorola Mobility LLC, FTC Docket No. C-4410 (July 24, 2013), https://tinyurl.com/v5p9sdwh; see also Complaint ¶ 20, In re Robert Bosch GmbH, FTC Docket No. C-4377 (Nov. 26, 2012), https://tinyurl.com/cncbdhy6 (seeking SEP injunctions causes harm to competition and “tends to undermine the vitality of the standard-setting process”).

Academics have also long recognized that SEPs present a risk of holdup through injunctions. In 2007, Mark Lemley and Carl Shapiro published an important article explaining how an injunction threat can “easily enable a patent holder to negotiate a settlement for an amount of money significantly exceeding the amount that the patent holder could expect to earn in damages based on reasonable royalties.” Patent Holdup and Royalty Stacking, 85 TEX. L. REV. 1991, 2008 (2007). Accordingly, any royalties obtained in such a scenario would not reflect the “underlying value of the patented technology, but the cost to the defendant of switching technologies midstream, that is driving the high royalties being paid.” Id. Indeed, the 2015 DOJ Letter observed that the “economic bargaining model underlying claims of holdup has been studied extensively and applied to the standard-setting context.” 2015 DOJ Letter at 6 n.28 (citing the Lemley and Shapiro article and others).

Since 2015, academics have continued to view SEPs as presenting a holdup threat while singling out the 2015 Patent Policy for providing much-needed clarity in SDO IPR policies. For example, Carl Shapiro and Mark Lemley returned to the subject in a 2020 article in which they observe that “antitrust has a role to play in policing holdup, particularly in cases where the patent owner avoids its contractual commitment or uses a SEP to restrict competition in adjacent markets.” Carl Shapiro & Mark Lemley, The Role of Antitrust in Preventing Patent Holdup, 168 U. PA. L. REV. 2019, 2021 (2020). They note that under the previous Administration, DOJ had “reversed course, dramatically
changing its approach to SEPs and FRAND commitments” in a way that “made it easier for SEP
holders to engage in patent holdup.” Id. at 2052. But they also observe that “considerable progress
to address the problem of patent holdup was made from 2006 to 2016,” and cite the 2015 Patent
Policy as an example of an SDO having “substantially clarified and strengthened the FRAND
commitments it requires of participants.” Id. at 2021-23. They recommend that further progress to limit
holdup could be made if other SDOs “follow the lead of the IEEE by clarifying and strengthening their
FRAND policies and creating mechanisms to enforce those policies.” Id. at 2023. See also A. Douglas
Melamed & Carl Shapiro, How Antitrust Law Can Make FRAND Commitments More Effective, 127
YALE L. J. 2110, 2111, 2136 (2018) (arguing that “existing antitrust laws have an important role to
play in ensuring that SSO rules are effective to prevent ex post opportunism” and noting that the
“recent revisions to IEEE’s FRAND policy represent a significant step in the right direction” in
clarifying FRAND commitments).

***The 2015 Patent Policy Properly Accounts For Appropriate RAND Factors***

The 2015 Patent Policy also appropriately includes three recommended factors for consideration in
determining a Reasonable Rate. Significantly, the Policy provides that these factors are not exclusive
and that determination of a Reasonable Rate “need not be limited to . . . consideration” of these three
factors.

First, as the 2015 DOJ Letter observed, “IEEE’s focus on the smallest saleable Compliant
Implementation may be appropriate in calculating a royalty that is correctly tied to the patented
invention, particularly when the product is complex and incorporates many patented technologies.”
2015 DOJ Letter at 12. That view is supported by a number of cases on determining damages
generally and RAND royalties specifically. See, e.g., VirnetX, Inc. v. Cisco Sys., Inc., 767 F.3d 1308,
1327 (Fed. Cir. 2014) (“The requirement that a patentee identify damages associated with the
smallest saleable patent-practicing unit is simply a step toward meeting the requirement of
apportionment. Where the smallest salable unit is, in fact, a multi-component product containing
several non-infringing features with no relation to the patented feature . . . , the patentee must do
more to estimate what portion of the value of that product is attributable to the patented technology.”);
GPNE Corp. v. Apple, Inc., No. 12-CV-02885-LHK, 2014 WL 1494247, at *13 (N.D. Cal. Apr. 16,
2014) (“The Court holds as a matter of law that in this case, the baseband processor is the proper
smallest saleable patent-practicing unit.”); In re Innovatio, 2013 WL 5593609, at *18 (“By taking the
profit margin on the sale of a chip for a chip manufacturer as the maximum potential royalty, it
accounts for both the principle of non-discrimination and royalty stacking concerns in RAND
licensing.”).

Although some courts since 2015 have observed that using the SSPPU is not necessarily the only
means to determine a reasonable royalty, they certainly have not concluded that doing so is improper.
A critical reason using the SSPPU is important is that employing the entire product price—particularly
of a complex electronic product—as a royalty base to value SEPs can improperly skew the royalty
setting process, as has been seen in some cases in the context of cellular SEPs. Starting with such a
high price relative to the value of the SEPs at issue leads to “anchoring” at that price and makes it
difficult to accurately reach a royalty that reflects the value of the SEPs rather than the value of the
entire product. See Joseph Kattan, The Next FRAND Battle: Why the Royalty Base Matters, CPI
ANTITRUST CHRONICLE (March 2015), https://tinyurl.com/neyrxsbvv. The Federal Circuit has
recognized this skewing risk for juries, see Ericsson, Inc. v. D-Link Sys., Inc., 773 F.3d 1201, 1227
(Fed. Cir. 2014), but the concern reaches more broadly to judges and to parties negotiating licenses.
The 2015 Patent Policy properly recognizes this risk and includes consideration of the SSPPU,
among other factors, in determining a Reasonable Rate.

Critics of the 2015 Patent Policy also may argue that the recent decision in HTC Corp. v.
Telefonaktiebolaget LM Ericsson, 12 F.4th 476 (5th Cir. 2021), casts doubt on looking to patent law decisions when determining RAND royalties. But that critique is misplaced. The HTC decision dealt only with the issue of what body of law should be used to instruct a jury in a breach of contract case involving an SDO that operates under French law. Id. at 484-85. As DOJ’s review of the 2015 Patent Policy confirmed, it is entirely appropriate for a U.S.-based SDO to consider U.S. patent law on determining reasonable royalties when setting a policy for how to determine a Reasonable Rate.

Second, consideration of the “value that the Essential Patent Claim contributes to the smallest saleable Compliant Implementation that practices that claim, in light of the value contributed by all Essential Patent Claims for the same IEEE Standard practiced in that Compliant Implementation” ensures that setting a Reasonable Rate will not lead to royalty stacking. Royalty stacking is a well-recognized risk posed by SEPs. It refers to the risk that many SEP holders will demand excessive royalty payments such that (1) “the cumulative royalties paid for patents incorporated into a standard exceed the value of the feature implementing the standard,” and (2) “the aggregate royalties obtained for the various features of a product exceed the value of the product itself.” Microsoft, 795 F.3d at 1031; see also Ericsson, 773 F.3d at 1209 (“SEPs pose two potential problems that could inhibit widespread adoption of the standard: patent hold-up and royalty stacking. … Royalty stacking can arise when a standard implicates numerous patents, perhaps hundreds, if not thousands. If companies are forced to pay royalties to all SEP holders, the royalties will ‘stack’ on top of each other and may become excessive in the aggregate.”).

Third, requiring that licenses relied upon to determine a Reasonable Rate “were not obtained under the explicit or implicit threat of a Prohibitive Order” and that the “circumstances and resulting licenses are otherwise sufficiently comparable to the circumstances of the contemplated license” accurately reflects both the law and common sense. For a license to be probative of the value of a patent, it must necessarily accurately reflect the value of that patent. As one court explained, “[u]nder the threat of a potential infringement lawsuit, the court cannot say that the VTech license agreement for Motorola’s 802.11 and H.264 SEPs is a reliable indicator of a RAND royalty rate.” Microsoft Corp. v. Motorola, Inc., No. C10-1823 JLR, 2013 WL 2111217, at *67 (W.D. Wash. Apr. 25, 2013). “The threat of a lawsuit, following a history of litigation between the parties, cannot form the basis for such a reasonable negotiation.” Id.

***Conclusion***

For at least any or all the above reasons, there is a widely held consensus that the 2015 Patent Policy should not be changed. Indeed, more than 40 companies and organizations—including sponsors of many significant contributions to IEEE-SA standards, as well as technology developers that create products using IEEE-SA standards—signed letters calling for the 2015 Patent Policy to remain unchanged. Letter to IEEE (Dec. 3, 2020), https://tinyurl.com/3kv8ezcx; Letter to IEEE (Feb. 9, 2021), https://tinyurl.com/lsnj3vbw.

**Cons:**

There are not any drawbacks to adhering to the 2015 Patent Policy.
Comments regarding the ongoing use of the Custom LOA form under this option:

| For standards projects initiated prior to the March 15, 2015, effective date of the 2015 Patent Policy, the custom LOA form should be permitted so that parties may make a declaration pursuant to the text of the IEEE Policy that was in effect at the time the project was initiated. |
| But for projects initiated after adoption of the 2015 Patent Policy, the custom LOA form should not be permitted. Allowing parties to create their own intellectual property rights regimes for IEEE-SA standards would greatly undermine the goals of clarity and consistency achieved by the 2015 Patent Policy and threaten the continued success of IEEE-SA’s work. |

Option ii(a): Remove all of the Patent Policy provisions regarding Prohibitive Orders

Pros:

| There would not be any benefits of removing the provisions regarding Prohibitive Orders from the 2015 Patent Policy. |
There would be significant drawbacks and negative consequences to removing the provisions on Prohibitive Orders from the 2015 Patent Policy. As explained in response to Option i, the 2015 Patent Policy responded to a demonstrated need for greater clarity about the nature of a RAND commitment, was the result of a deliberative and thorough adoption process, reflects well-settled law and scholarship regarding the harms from SEP injunctions, and supports increased innovation at IEEE-SA.

Maintaining the provisions on Prohibitive Orders is crucial to ensure the continued benefits achieved by the 2015 Patent Policy. Removing the provisions regarding Prohibitive Orders would not only weaken protections against injunctions but could also be interpreted as an endorsement by IEEE of the propriety of seeking injunctions for SEPs. That would encourage and condone the current abusive behavior by some SEP holders in seeking, or threatening to seek, injunctions for SEPs and will undermine the attractiveness of using IEEE-SA standards.

The ability of SEP holders to use the threat of an injunction to obtain substantial leverage over a potential licensee has been clearly demonstrated. For example, the European Commission concluded that Motorola was able to use the threat of an injunction on a cellular SEP in Germany to coerce Apple to accept "disadvantageous licensing terms": "faced with the enforcement of the injunction, Apple had the choice of either having its products excluded from the market or accepting the disadvantageous licensing terms requested by Motorola as a condition for not enforcing the injunction." Case AT.39985—Motorola—Enforcement of GPRS Standard Essential Patents, Comm’n Decision ¶ 320 (Apr. 29, 2014), https://tinyurl.com/rz9uewee. Similarly, when Microsoft faced the prospect of a German injunction on H.264 SEPs, it undertook the burden of relocating its distribution center from Germany to the Netherlands as a protective measure at a cost of more than $11 million. Microsoft Corp. v. Motorola, Inc., 795 F.3d 1024, 1032-34 (9th Cir. 2015). As IEEE’s guide to the 2015 Patent Policy aptly explains, “[n]egotiating without the threat of a Prohibitive Order will lead to licenses providing appropriate compensation to the patent holder for the value of practicing the Essential Patent Claim rather than any value resulting from the inclusion of that Essential Patent Claim’s technology in the IEEE Standard." Introduction and guide to the IEEE-SA patent policy effective 15 March 2015 at 33 (April 24, 2019), https://tinyurl.com/zjc2phwj. If injunctions can be freely threatened, the resulting licenses will include holdup costs that reflect the value of the standard, prior art, other patented and non-patented technologies included in a complex final product and not the value of the SEP at issue.

When holdup occurs, it is consumers who suffer because it causes increased prices and ultimately decreased innovation. “Basic economic principles instruct that ex post monopoly pricing by SEP holders harms consumers by raising the cost of products that comply with the standard.” A. Douglas Melamed & Carl Shapiro, How Antitrust Law Can Make FRAND Commitments More Effective, 127 YALE L. J. 2110, 2116 (2018) [hereinafter Melamed & Shapiro]. The increased costs of products using a standard and of SEPs cause further downstream harms. First, increasing the cost of producing products that use a standard will reduce output. Id. Second, increased SEP prices operate as a “tax on follow-on innovation,” and disincentivize product suppliers from building on top of standardized technology to create more innovation. Id. Third, allowing SEP holders to coerce supra-competitive royalties only serves to incentivize further bad behavior, which can undermine the standard-setting process itself as firms jockey to capture more of the standard in SEPs so that they can take advantage of unconstrained holdup power. Id.

Critics of the 2015 Patent Policy will argue that holdup is merely theoretical and that there is no empirical evidence of holdup. But as DOJ observed in 2015, the “economic bargaining model
underlying claims of hold up has been studied extensively” across a wide array of economic activity and there is no reason to conclude that it is not equally applicable to standard setting. Business Review Letter to IEEE at 6 n.28 (Feb. 2, 2015), https://tinyurl.com/3mnhmy56 (“2015 DOJ Letter”). Moreover, it is not correct that there is no evidence of holdup. In addition to the examples mentioned above, DOJ observed in 2015 that “litigated cases demonstrate the potential for hold up when owners of RAND-encumbered standards-essential patents make royalty demands significantly above the adjudicated RAND rate” and pointed as examples to In re Innovatio IP Ventures, LLC Patent Litig., No. 11 C 9308, 2013 WL 5593609, at *43 (N.D. Ill. Oct. 3, 2013), where a court set RAND royalties of $0.0956 per unit as compared to the proposed royalty of $16.17 per unit for tablet computers, and Microsoft Corp. v. Motorola, Inc., No. C10-1823, 2013 WL 2111217, at *100 (W.D. Wash. Apr. 25, 2013), where the court determined a RAND rate of $0.03471 per Xbox compared to an initial demand of $6-$8 per Xbox. 2015 DOJ Letter at 7 n.28.

Conversely, the purported evidence showing an absence of holdup—such as studies demonstrating a quality-adjusted decrease in the prices of consumer goods over time—does not demonstrate what its proponents claim. That quality-adjusted prices for electronics products have decreased does not prove that there has been no holdup or that prices would not have decreased much more significantly absent holdup. See Melamed& Shapiro at 2117-18. Moreover, such studies do not even attempt to disprove that SEP holders have been overcompensated by holdup royalties.

In addition to reinstating the harms from holdup, removing the provisions on Prohibitive Orders would reverse the bargain that the SEP holder strikes when committing to grant RAND licenses. As DOJ recently observed, “patent holders benefit when their technologies are chosen [for a standard]. They gain access to a potentially large market for their SEPs—and with this new market, the possibility of substantial royalties.” Jeffrey Wilder, Economics Director of Enforcement, Antitrust Div., U.S. Dept' of Justice, Leveling the Playing Field in the Standards Ecosystem: Principles for A Balanced Antitrust Enforcement Approach to Standards-Essential Patents, 3 (Sept. 29, 2021), https://tinyurl.com/zjc2phwj.

But the bargain SEP holders strike in exchange for these benefits is that they will license all interested users on RAND terms. As the Ninth Circuit described in Microsoft Corp. v. Motorola, Inc., 696 F.3d 872, 885 (9th Cir. 2012): “Motorola made promises to the ITU to license its standard-essential patents worldwide to all comers. In exchange, it received the benefit of having its patents implicated in the standards. Motorola could have withheld the promise at the price of having the ITU avoid its patents when setting standards, but chose not to.” 696 F.3d 872, 885 (9th Cir. 2012). The decision to take advantage of the benefits of standardization means that SEP holders must also agree to the necessary constraints required of SEP holders to ensure that the standard can be widely adopted without holdup—including foregoing injunctive relief where monetary remedies are available. See id. at 884 (“Implicit in such a sweeping promise is, at least arguably, a guarantee that the patent-holder will not take steps to keep would-be users from using the patented material, such as seeking an injunction, but will instead proffer licenses consistent with the commitment made.”).

Indeed, where monetary damages are available—and so the SEP holder can obtain the RAND royalties it promised to accept for use of its SEPs—the only reason for seeking an injunction is for the SEP holder to reclaim the bargaining leverage that it voluntarily gave up when agreeing to a RAND commitment. See Realtek Semiconductor Corp. v. LSI Corp., 946 F. Supp. 2d 998, 1007 (N.D. Cal. 2013) (“[T]he pending threat of an exclusion order gives defendants inherent bargaining power in any RAND licensing negotiation that may now take place.”). As Justice Kennedy observed in eBay Inc. v. MercExchange, L.L.C., an injunction for patent infringement “may not serve the public interest” in cases where “the patented invention is but a small component of the product the companies seek to produce and the threat of an injunction is employed simply for undue leverage in negotiations.” 547 U.S. 388, 396-97 (2006) (Kennedy, J., concurring).
Comments regarding the ongoing use of the Custom LOA form under this option:

For standards projects initiated prior to the March 15, 2015, effective date of the 2015 Patent Policy, the custom LOA form should be permitted so that parties may make a declaration pursuant to the text of the IEEE Policy that was in effect at the time the project was initiated.

But for projects initiated after adoption of the 2015 Patent Policy, the custom LOA form should not be permitted. Allowing parties to create their own intellectual property rights regimes for IEEE-SA standards would greatly undermine the goals of clarity and consistency achieved by the 2015 Patent Policy and threaten the continued success of IEEE-SA’s work.


In addition, attempts to derail the acceptance of 802.11ax at ISO should not influence the decision to retain the 2015 Patent Policy without change. ISO can still accept the standard. The negative LOAs do not identify any specific patents and, even if they did, ISO may ask the patent holder to submit a licensing commitment under its own patent policy. IEEE should not respond to this attempt to undermine its relevance internationally by abandoning a patent policy that is serving IEEE, its members, SEP licensors, SEP licensees, and the public that depend on IEEE’s standards well.

Option ii(b): Remove all optional factors included in the definition of Reasonable Rate

Pros:

There would not be any benefits of removing the factors included in the definition of Reasonable Rate.
Cons:

There would be significant drawbacks and negative consequences to removing the factors included in the definition of Reasonable Rate. As explained in response to Option i, the 2015 Patent Policy responded to a demonstrated need for greater clarity about the nature of a RAND commitment, was the result of a deliberative and thorough adoption process, reflects well-settled law and scholarship regarding how to determine RAND royalties, and has supported increased innovation at IEEE-SA. Maintaining the factors for consideration in the definition of a Reasonable Rate is crucial to ensure the continued benefits achieved by the 2015 Patent Policy.

Removing the factors included in the definition of Reasonable Rate could be interpreted as an endorsement by IEEE of the notion that those factors are not relevant to determining a RAND royalty. That would lead to greater uncertainty about how to determine RAND royalties for IEEE-SA standards and result in more licensing abuse and decreased incentives for use of IEEE-SA standards.

First, as DOJ observed in 2015, “IEEE’s focus on the smallest saleable Compliant Implementation may be appropriate in calculating a royalty that is correctly tied to the patented invention, particularly when the product is complex and incorporates many patented technologies.” Business Review Letter to IEEE at 12 (Feb. 2, 2015), https://tinyurl.com/3mnhmy56. A critical reason for using the smallest saleable Compliant Implementation is that using the entire product price—particularly of a complex electronic product—as a royalty base to value SEPs can improperly skew the royalty setting process. The Federal Circuit has recognized this skewing risk for juries, see Ericsson, 773 F.3d at 1227, but the concern reaches more broadly to judges and to parties negotiating licenses. The 2015 Patent Policy properly recognizes this risk and directs consideration of the smallest saleable Compliant Implementation, among other factors, in determining a Reasonable Rate.

Second, consideration of the “value that the Essential Patent Claim contributes to the smallest saleable Compliant Implementation that practices that claim, in light of the value contributed by all Essential Patent Claims for the same IEEE Standard practiced in that Compliant Implementation” ensures that setting a Reasonable Rate will not lead to royalty stacking. Royalty stacking is a well-recognized risk posed by SEPs.

Third, requiring that licenses relied upon to determine a Reasonable Rate “were not obtained under the explicit or implicit threat of a Prohibitive Order” and that the “circumstances and resulting licenses are otherwise sufficiently comparable to the circumstances of the contemplated license” accurately reflects both the law and common sense. For a license to be probative of the value of a patent, it must necessarily accurately reflect the value of that patent.

Comments regarding the ongoing use of the Custom LOA form under this option:

For standards projects initiated prior to the March 15, 2015, effective date of the 2015 Patent Policy, the custom LOA form should be permitted so that parties may make a declaration pursuant to the text of the IEEE Policy that was in effect at the time the project was initiated.

But for projects initiated after adoption of the 2015 Patent Policy, the custom LOA form should not be permitted. Allowing parties to create their own intellectual property rights regimes for IEEE-SA standards would greatly undermine the goals of clarity and consistency achieved by the 2015 Patent Policy and threaten the continued success of IEEE-SA’s work.
Option iii: Offer more options than before by: Allowing an LOA filer the ability to choose whether it may seek or not seek Prohibitive Orders in accordance with the current wording of the Patent Policy; and Clarifying the optionality of the factors included in the definition of Reasonable Rate.

**Pros:**

| There would not be any benefits of allowing an LOA filer for a project initiated after the March 15, 2015, effective date of the 2015 Patent Policy to choose whether it may seek or not seek Prohibitive Orders or whether it will adhere to consideration of the factors in the Patent Policy for determination of a Reasonable Rate. |

**Cons:**

| There would be significant drawbacks and negative consequences of allowing an LOA filer for a project initiated after the March 15, 2015, effective date of the 2015 Patent Policy to choose whether it may seek or not seek Prohibitive Orders or whether it will adhere to consideration of the factors in the Patent Policy for determination of a Reasonable Rate. As explained in response to Option i, the 2015 Patent Policy responded to a demonstrated need for greater clarity about the nature of a RAND commitment, has supported increased innovation at IEEE-SA, was the result of a deliberative and thorough adoption process, and reflects the inherent limitations of a RAND licensing commitment as well-settled law regarding the harms of injunctions for SEPs and how to determine RAND royalties. Maintaining the limitations on seeking injunctions and the factors for consideration in the definition of a Reasonable Rate is crucial to ensure the continued benefits achieved by the 2015 Patent Policy. |
| Allowing LOA filers a free hand to customize an LOA for a project initiated after the March 15, 2015, effective date of the 2015 Patent Policy would effectively gut the Policy. It would create different licensing and litigation regimes for different SEP holders thereby undermining the clarity that the 2015 Patent Policy was intended to achieve. Further, it would discourage the adoption and use of IEEE-SA standards because it could be interpreted as a signal that IEEE condones seeking injunctions and has abandoned the use of important factors for determining RAND royalties. |
| The optionality of the factors in determining a Reasonable Rate is sufficiently clear in the 2015 Patent Policy. |

**Comments regarding the ongoing use of the Custom LOA form under this option:**

| For standards projects initiated prior to the March 15, 2015, effective date of the 2015 Patent Policy, the custom LOA form should be permitted so that parties may make a declaration pursuant to the text of the IEEE Policy that was in effect at the time the project was initiated. |
| But for projects initiated after adoption of the 2015 Patent Policy, the custom LOA form should not be permitted. Allowing parties to create their own intellectual property rights regimes for IEEE-SA standards would greatly undermine the goals of clarity and consistency achieved by the 2015 Patent Policy and threaten the continued success of IEEE-SA’s work. |
Option i: No change to the text of the 2015 Patent Policy

Pros:

The Patent Policy should properly balance between the interests of SEP holders seeking reasonable compensation and those of SEP users. The IEEE Patent Policy balances the interests of SEP holders and users of IEEE standards and supports the success of the IEEE standards. It provides clarity in the marketplace, reduces disputes and preserves the benefits of competition. However, revisions to the IEEE Patent Policy would increase uncertainty about the prohibition order and the SEP licensing terms and decrease SEP users' opportunities of adopting the IEEE standard. These revisions would interfere with the sustainable development of the automobile industry.

Cons:

There are no cons to maintaining the IEEE Patent Policy.

Comments regarding the ongoing use of the Custom LOA form under this option:

For standards projects initiated prior to the effective date of the IEEE Patent Policy, the custom LOA form should be permitted so that parties may make a declaration pursuant to the text of the IEEE policies that were in effect at the time the project was initiated. But for projects initiated after adoption of the Patent Policy, the custom LOA form should not be permitted.

Option ii(a): Remove all of the Patent Policy provisions regarding Prohibitive Orders

Pros:

There are no benefits to removing the IEEE Patent Policy’s express limitations on prohibitive orders.

Cons:

The use of injunctions or similar prohibitive orders against IEEE standards would interfere with the use and promulgation of the IEEE standards. This situation would be undesirable for the automobile industry. As indicated in the IEEE Patent Policy, the prohibitive orders should only be implemented if SEP holders can't obtain reasonable compensation by other means, such as court adjudication.
Comments regarding the ongoing use of the Custom LOA form under this option:

For standards projects initiated prior to the effective date of the Patent Policy, the custom LOA form should be permitted so that parties may make a declaration pursuant to the text of the IEEE policies that were in effect at the time the project was initiated. But for projects initiated after adoption of the Patent Policy, the custom LOA form should not be permitted.

**Option ii(b): Remove all optional factors included in the definition of Reasonable Rate**

**Pros:**

There are no benefits to removing the optional factors in the definition of Reasonable Rate.

**Cons:**

Increasing uncertainty around SEP licensing terms would inhibit negotiations, increase disputes, create the potential for abuse and undermine adoption of IEEE standards. With regard to the use and dissemination of the IEEE standard, the IEEE Patent Policy should prevent the SEP users from being unable to use the IEEE standard due to unexpected high royalties arising from uncertainties around SEP licensing terms.

Comments regarding the ongoing use of the Custom LOA form under this option:

For standards projects initiated prior to the effective date of the Patent Policy, the custom LOA form should be permitted so that parties may make a declaration pursuant to the text of the IEEE policies that were in effect at the time the project was initiated. But for projects initiated after adoption of the Patent Policy, the custom LOA form should not be permitted.

**Option iii: Offer more options than before by:** Allowing an LOA filer the ability to choose whether it may seek or not seek Prohibitive Orders in accordance with the current wording of the Patent Policy; and Clarifying the optionality of the factors included in the definition of Reasonable Rate.

**Pros:**

There are no benefits to these approaches.
Cons:

These approaches are unnecessary and may cause confusion about the IEEE Patent Policy.

<As to “Allowing the LOA Filer the Ability to Choose Whether it May or May Not Seek Prohibitive Orders in Accordance with the Current Wording of the Patent Policy”>

As mentioned in the Option ii (a), the prohibitive orders should only be implemented if SEP holders can’t obtain reasonable compensation by other means, such as court adjudication.

<As to“Clarifying the Optionality of the Factors Included in the Definition of Reasonable Rate”>

The optionality of the factors in the Patent Policy already is well addressed in the policy, and also in the IEEE’s FAQs. In order to ensure the interests of both SEP holders and SEP users, it is important to

Comments regarding the ongoing use of the Custom LOA form under this option:

For standards projects initiated prior to the effective date of the Patent Policy, the custom LOA form should be permitted so that parties may make a declaration pursuant to the text of the IEEE policies that were in effect at the time the project was initiated. But for projects initiated after adoption of the Patent Policy, the custom LOA form should not be permitted.
Option i: No change to the text of the 2015 Patent Policy

Pros:

The 2015 Patent Policy is clear and predictable, which gives a good guidance in negotiation and disputes. It is noticed that the number of patent litigations arising from WIFI standard are far less than from cellular standard in recent years, which should benefit from the 2015 Patent Policy. If the changes made to the patent policy now, it may harm the reliance interests of implementers and users of IEEE standards, and opposed to the further dissemination and development of IEEE standard technologies.

Cons:

We see no obvious Cons for this Option, at least, for now.

Comments regarding the ongoing use of the Custom LOA form under this option:

Option ii(a): Remove all of the Patent Policy provisions regarding Prohibitive Orders

Pros:

We see no obvious Pros to do so, at least, for now.

Cons:

On one hand, the abusive use of Prohibitive Orders has a big impact on the implementers of IEEE standard. On the other side, the patentees can always get reasonable compensation even without Prohibitive Order. Furthermore, the current policy still allow to enforce prohibition orders in specific circumstances, which provides a better balance between the SEP holders and the implementers and users of IEEE standards.

Comments regarding the ongoing use of the Custom LOA form under this option:
Option ii(b): Remove all optional factors included in the definition of Reasonable Rate

Pros:

We see no obvious Pros to do so, at least, for now.

Cons:

The expression of optional factors in the definition of Reasonable Rate provides a reasonable reference. The factors in determining the reasonable rates helps to control the excessive demand of royalties and give reasonable compensation to SEP holders, which conform to the IEEE mission.

Comments regarding the ongoing use of the Custom LOA form under this option:

Option iii: Offer more options than before by: Allowing an LOA filer the ability to choose whether it may seek or not seek Prohibitive Orders in accordance with the current wording of the Patent Policy; and Clarifying the optionality of the factors included in the definition of Reasonable Rate.

Pros:

We see no obvious Pros to do so, at least, for now.

Cons:

If an LOA filer is given, it will weaken the restrictions on the Prohibitive order and weaken its reference in judicial practice, which is not conducive to the dispute settlement and the implementation of technologies, and may cause significant increase of patent fees.

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