



November 27, 2017

Dear Sir,

I am responding to the Telecom Regulatory Authority of India consultation paper on promoting local telecom equipment manufacturing as a citizen with technical and legal experience in the interplay between standardisation and intellectual property rights (IPR) such as patents.

I have practiced in this domain first as an electronics engineer, and later intellectual property and competition lawyer. As such, I have witnessed first-hand technical issues, their implications and legal ramifications, in a number of cases in United States, Europe and India. I have had the privilege to have advised both companies, and law firms in India on these issues.

My clients at various times have included IPR owners, licensees, patent pools, and standards bodies. However, most of my current clients are licensees.

It is my expectation that the benefits of technology reach out to the common man under the Make in India and Digital India programs. It is my view that no entity should be able to use SEPs as well as non-SEPs to hold up manufacturers and suppliers in India. Similarly, no company should be able to off-load their portfolios to "privateers" with views to raise costs of rivals.

While my individual recommendations focus on principles applicable to all IPR enforcement actions, I believe that a clearer and more robust application of the requirements of equity and proportionality will meaningfully improve treatment of disputes involving SEPs, and help to address many of the problems arising in this domain.

I hope that the TRAI finds my perspectives helpful, and thank the TRAI for its efforts to promote a healthy standards ecosystem that benefits Indian markets, industries and consumers.

Thank you for your time and attention to my submission. The attached materials are all public, and submitted on my own personal behalf, and not on behalf of any client, nor on behalf of my firm.

With my best regards,

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INTRODUCTION

Current discussions about licensing SEPs on FRAND terms are usually framed as pitting the views of “implementers” against those of so-called “innovators,” implying that implementers do not innovate, and further that the distinction between the two is based on their respective commitments to R&D. This characterization has been used to attempt to dismiss companies not having any patents views on these subjects as merely being those of an “implementer.” Such a characterization is not only incorrect, but is also misleading.

These companies have ensured that a mobile phone is available in every corner, and every village, and city in India. A village may not have electricity, but thanks to these implementers, the villagers have mobile phones. These companies truly Connect India¹.

These companies innovate from the other end, i.e. taking the product to the masses. As numerous studies show, taking the product to the end consumer is not an easy task. Since 2008-09, these companies have invested heavily into setting up distribution and retail channel such that the list of top sellers has completely changed.²

Not only do these implementers innovate, but more importantly they fulfill the goal of the standard setting organization set up to promote standards and their adoption.

Because of the harm to industry and consumers, by abusive SEP licensing practices, I offer my insights, perspectives, and experiences on key issues raised in the Questionnaire provided for in the TRAI paper. In subsequent sections of the response, suggested answers to the questions are provided.

The continued success and existence of standard setting is threatened by a few companies that ignore their FRAND commitments and exploit the need of implementers to practice their SEPs. That threat can lead directly to consumer harm through increased costs of goods, and consequently less competition. In India, very few mobile providers are able to stay and retain their competitive edge in the market. Indeed very few are profitable, and the industry has very small

¹ Connecting India is the corporate signature of Bharat Sanchar Nigam Ltd. (BSNL)

² See <http://business.mapsofindia.com/top-brands-india/top-mobile-brands-in-india.html>

margins.³ One explanation for this could be high royalty demands.⁴ If Indian companies give in to the irrational demands raised by some SEP owners, then it is curtains. Any step by sectoral regulators or courts that encourage or entrench abusive SEP licensing practices, will diminish competition and will have long term impacts on end consumers.

³ See article http://www.business-standard.com/article/companies/indian-handset-makers-chase-wafer-thin-profits-114061000792_1.html

⁴Armstrong, et al. The Smartphone Royalty Stack: Surveying Royalty Demands for the Components Within Modern Smartphones 2, 13-14 (Working Paper, 2014), available at http://www.wilmerhale.com/uploadedFiles/Shared_Content/Editorial/Publications/Documents/The-Smartphone-Royalty-Stack-Armstrong-Mueller-Syrett.pdf (discussing that cumulative royalty burden for a \$400 smartphone data could be approximately \$120).

EXECUTIVE SUMMARY

I believe that it is a fundamental proposition that owners of valid, enforceable and infringed patents should be able to obtain reasonable compensation for others' use of their patented technology. But this right is subject to the application of fundamental principles of equity, and proportionality. The principle of 'Proportion' limits compensation to the actual patented invention. Anything beyond the value of the patented invention or technology is a form of unjust enrichment.

I have seen some SEP owners use questionable tactics to extract royalties much beyond the value of their patented inventions. Based on this experience, I believe that the following topics raised by the TRAI Consultation require the most immediate attention:

I. A SEP Owner Is Not Entitled to A Higher Legal Pedestal

The mere ownership of a SEP confers market power.⁵ In many ways, a FRAND promise is designed to counter balance this power. That said, some SEP owners seek to twist the FRAND promise and interpret FRANDs procompetitive provisions as a sword and create new interpretations that give them the right to assert infringement without proving it, and collect royalties not accruable to them in any manner, and also not available to any other patent holders.

In the normal course of collecting compensation for patents that are *not* encumbered by a FRAND promise, patent owners must prove infringement on a claim by claim basis for each patent, and in the course of such an assertion withstand challenges such as validity and enforceability. Once this threshold is met, i.e. the patent is proved to be valid and infringed, only then is the enquiry conducted for damages. This is once again done on a patent-by-patent basis.

Recent case law from the Delhi High Court flips these basic issues. Patent have been presumed to be valid, and infringed, and essentiality is presumed because the patentee claims that other entities have taken a license to the SEPs.⁶

⁵ See decision of Competition Commission of India; *Intex Tech. Ltd. v. Telefonaktiebolaget LM Ericsson*, Case No. 76 of 2013

⁶ See *Telefonaktiebolaget LM Ericsson v. Intex Techs. (India) Ltd*, Interim Application No. 6735 of 2014 in Civil Suit (Original Side) No. 1045 of 2014, High Ct. of Delhi (13 March 2015), available at: <http://lobis.nic.in/dhc/MAN/judgement/16-03-2015/MAN13032015S10452014.pdf>

SEP owners should not be given any special status and placed along with normal patent owners. The traditional legal rules and burdens of proof should apply to them equally. Just because the patent owner participated in the standard setting process and self-declared hundreds of patents to be essential does not mean that (i) burden of proof requirements are waived for them, or (ii) they can stake a special claim to royalties on an end product when their patents (alleged SEPs) may at most be implicated in a miniscule component of the end product, both according to price and size parameters.

II. A FRAND Commitment is Incompatible with Portfolio Based Adjudication Approach

Some SEP owners cite to benefits of portfolio licensing and ease of transaction for potential licensees. This approach in reality, is bundling, and is an extremely questionable practice. This is because such SEP owners give a term license and state that for the duration of license, the licensee would be covered for all patents, whether existing or whether they are granted later. A specific list of patents applicable to the licensee is usually not provided. Others may clearly state that the licensee is being charged only for SEPs, and no charge is being levied for non-essential or implementation specific patents. Even if it is assumed that all patents in a portfolio are actually essential, they are not of the same value. Second, if patents are being added to the portfolio and existing patents' term expires, how is value of the portfolio kept at the same level. This approach, assumes that rate of addition and rate of expiry are the same—in reality—they are poles apart.

A prospective licensee should be able to take a license only to those patents that it really requires, and be able to challenge the validity or applicability of others. However, the licensor is unwilling to a patent-by-patent approach but rather insist on a blanket approach.

This behaviour of SEP owners is incompatible with the FRAND commitment as it focusses on the outcome (licensed vs. non-licensed). The outcome is usually non-FRAND.⁷

III. Courts and neutral arbitration: To be the preferred mode of dispute resolution

The Delhi High Court in *Niki Tasha India Pvt. Ltd. vs Faridabad Gas Gadgets Pvt. Ltd.* 26 (1984) DLT 355 stated, “[T]he Court leans against monopolies. The (grant of) certificate does not establish a conclusive right. *It has to be tried and tested in the*

⁷ See supra note 5

laboratory of courts.” The Court was opining on a design registration, but it is equally applicable for SEPs as well. Validity, essentiality, and infringement are all matters of trial and to be tested in the court with fair opportunity given to the defendant to counter. Potential licensees of SEPs should remain free to challenge the validity, essentiality or infringement of SEPs. It is in the public interest that potentially invalid patents can be challenged in court and that companies, and ultimately consumers, are not obliged to pay for patents that are not infringed.

IV. Refusal to Deal with First Implementers Violates the FRAND Promise

A refusal to deal with implementers at lower level of the value chain in the industry is also incompatible with the promise to license on FRAND terms. The value chain may be summarized as:

Chipset Designer → Chipset Manufacturer → OEM/ODM → Product Brand Owner
→ Distributor → Customer

Some SEP owners, simply skip going to the chipset manufacturer, and reach to the Brand Owner to extract higher amounts because of the value added at subsequent stages. This is not only unreasonable, but a violation of the FRAND promise. A complete product that can implement the standard and available commercially is the chipset. Refusal to deal with or license chipset manufacturers is an abuse of competition law.

V. FRAND Calculation Must Take Into Account Multiple Factors

FRAND calculations are based on multiple set of factors, but in principle, it should be based on “value of the patented invention before it became incorporated into the standard”. And the value should also keep into mind the aggregate impact of any individual FRAND royalty on the licensee and other implementers (*i.e.*, royalty stacking). This is because a licensee has to factor in not just one demand from a licensor but from multiple licensees.

Similarly, if royalty has been obtained elsewhere in the value chain, the same should be reflected in the demand. For example, mobile operators are separately licensed by SEP owners. This may be done by a Technical services contract within a Multi-Service Operator Contract. SEPs are also used by the Operator as both a base-station and handset must conform to the same norms as provided in a standard.

The reality is that Operators pay the SEP owners separately and device providers pay separately. Device providers do not get a credit for the value extracted from the operators. This is classic double-TRAling.

As outlined in the TRAI paper, some courts / sectoral regulators have given recognition to the concept of the “smallest salable patent practicing unit” to focus royalty analyses on the patented invention. This approach avoids attributing to the patentee any value associated with a particular patent’s inclusion in a standard, and importantly helps avoid awarding to the patentee any extra royalties related to the contributions and innovations of others (*i.e.*, marketing and manufacturing investment, component choices, other patented technologies, brand value, etc.).

Several studies outline that there are at least 250,000 patents and applications self-declared to the various cellular standards, held by scores of licensors⁸. Any calculation of a FRAND royalty should consider the impact on implementers of adding on these royalties. Hence to check royalty stacking, each owner’s demand must be evaluated in view of that owner’s *pro rata* ownership of all SEPs for the standard in question.

VI. Defining a “Willing Licensor”. In the few cases at the Delhi High Court, would be licensors were tagged with the label “unwilling licensee” simply because they demanded some information, which was not forthcoming.⁹ If a licensee can be unwilling, so too can an owner. The SEP owner must provide timely and adequate information sufficient to enable the would-be licensee to assess whether an offer is FRAND. This information includes but is not limited to providing a detailed description of its patents, including relevant claim charts, a clear methodology leading to a specific FRAND rate according to the patent, and sufficient information to allow the prospective licensee to verify the non-discriminatory nature of the offer.

This information exchange could help in determining whether either party has negotiated fairly, and could be crucial in cases where an injunction is asked for.

VII. Licensors Should Not Be Entitled to Injunctive Relief, Except in Very Limited Circumstances

⁸ See <http://www.sec.gov/Archives/edgar/data/1509432/000119312511240287/ds1.htm> and also <http://www.project-disco.org/intellectual-property/one-in-six-active-u-s-patents-pertain-to-the-smartphone/#.VxkKVDB97IV>

⁹ See *Telefonaktiebolaget LM Ericsson v. Best IT World (India) Pvt. Ltd*, Civil Suit (Original Side) No. 2501 of 2015, High Ct. of Delhi (02 September 2015), available at <http://lobis.nic.in/ddir/dhc/MAN/judgement/03-09-2015/MAN02092015S25012015.pdf>

The recent European Commission's *Motorola* and *Samsung* precedents, as well as the *Huawei v. ZTE* matters, form part of the global consensus that injunctive relief based on FRAND encumbered SEPs against willing licensees is an actionable abuse of the dominant position. The SEP owner always has the trump card of seeking FRAND-level damages using traditional legal procedures.

VIII. Transaction Transparency for FRAND Encumbered SEPs Should Be Increased

The current system of self-declaration and limited scrutiny by patent offices has resulted in a large number of patents declared as SEPs that turn out to be non-essential or invalid or not actually implemented when tested in litigation.¹⁰ Multiple credible studies reflect the amount of over-declaration in this domain.¹¹ This volume game SEP portfolios transactions allow SEP owners to claim a disproportionate share of royalties associated with the standard, while insulating their portfolios from robust review. This concern could be addressed by having a participant led verification system that classify any patent as being actually used to implement the standard.

¹⁰ See J. Jurata, Jr. and D. Smith, "Turning the Page: The Next Chapter of Disputes Involving Standard Essential Patents," CPI Antitrust Chronicle (Oct. 2013) available at <https://www.orrick.com/Events-and-Publications/Documents/CPI-October-2013-Jurata-Smith.pdf>

¹¹ See http://frlicense.com/GSM_FINAL.pdf; <http://frlicense.com/wcdma1.pdf>; <http://frlicense.com/wcdma2.pdf>; <http://frlicense.com/wcdma3.pdf>; and <http://frlicense.com/LTE%20Final%20Report.pdf> together known as Fairfield reports.

Q.3 Are the existing patent laws in India sufficient to address the issues of local manufacturers? If No, then suggest the measures to be adopted and amendments that need to be incorporated for supporting the local telecom manufacturing industry.

The current provisions in Indian laws may provide adequate opportunity to address issues of local manufacturers and deter SEP abuses, if they are applied in a proportionate, fair and reasonable manner. For example, the *Specific Relief Act, 1963* (Section 41(h))¹² expressly bars injunctions when an alternate efficacious remedy is available. This principle can be read to decline an injunction as patent holder has already agreed to monetary terms such as FRAND royalties.

Likewise, *The Patents Act, 1970* (Section 10(4)(c)) limits the scope of an invention.¹³

It defines the scope of the patent monopoly, and should be read to limit the royalty that can be demanded by a licensor to the same scope. That is, it should be a matter of common sense that a patent holder should not demand a royalty that exceeds the scope of what has been invented and claimed and subsequently granted in the patent.

Similarly, the *Competition Act, 2002* provides adequate remedies for abuse of dominant position under Section 4. Section 3(5) does not enjoin a patent holder from asserting its rights and preventing infringement of the patent, but rather addresses abuses of the patent rights that occur in specific circumstances, such as with the violation of the FRAND promise.¹⁴

¹² 41. Injunction when refused.—An injunction cannot be granted—

.....

(g) to prevent a continuing breach in which the plaintiff has acquiesced;

(h) **when equally efficacious relief can certainly be obtained by any other usual mode of proceeding** except in case of breach of trust;

.....

¹³ 10. (4) Every complete specification shall—

(a) fully and particularly describe the invention and its operation or use and the method by which it is to be performed;

(b) disclose the best method of performing the invention which is known to the applicant and for which he is entitled to claim protection; and

(c) end with a claim or claims defining the scope of the invention for which protection is claimed;

(d) be accompanied by an abstract to provide technical information on the invention:

¹⁴ Competition Act. (3) (5) Nothing contained in this section shall restrict—

(i) the right of any person to restrain any infringement of, or to impose reasonable conditions, as may be necessary for protecting any of his rights which have been or may be conferred upon him under—

... (b) the Patents Act, 1970 (39 of 1970);

Abuse of dominant position

4. [(1) No enterprise or group shall abuse its dominant position.]

Finally, the fundamental principles of *equity*, and *proportionality* are built into the Indian legal framework, and should be used appropriately to limit patent abuses that seek to unfairly extend the scope of the patent monopoly. Fairness, equity and proportionality should be considered by judicial authorities before any injunction is issued in matters involving SEPs. I also believe in encouraging *transparency* in dealing with complex SEP licensing issues.

Guidance from the TRAI and other government authorities to further clarify the meaning of FRAND may provide additional benefit, however, as has been done in other jurisdictions.

Q.5 Please suggest a dispute resolution mechanism for determination of royalty distribution on FRAND (Fair Reasonable and Non Discriminatory) basis.

Ideally, the market participants should be able to negotiate the specifics of FRAND terms on a voluntary basis along with dispute resolution mechanism. Agency guidelines framed under the principles of natural justice can provide helpful guidance for all parties. The agencies responsible could be the TRAI or the Ministry of Electronics and Information Technology (MEITY) or the Department of Industrial Policy (DIPP) or the Competition Commission of India or a combination of agencies as the issues involve technology, law, competition, telecom, semiconductors, etc.

I believe that FRAND should, for example, mean at least the following:

- A license for a SEP should be available at any point in the value chain where the standard is implemented, and the important terms of those licenses should be transparent to other companies implementing the same standards;
- A FRAND royalty should reflect the value of the invention. In most cases that means that it should be based on the smallest device that implements those patents, and additionally it should take into account the overall royalty that could be reasonably charged for all patents that are essential to that standard;
- Injunctions and similar legal threats should be a last resort;

(2) There shall be an abuse of dominant position 4 [under sub-section (1), if an enterprise or a group].—
(a) directly or indirectly, imposes unfair or discriminatory—
(i) condition in purchase or sale of goods or service; or (ii) price in purchase or sale (including predatory price) of goods or service.

- A FRAND commitment made in respect of a SEP should not fall away simply because the SEP is sold to another company.

While parties generally should be entitled to negotiate and conclude licenses on a voluntary basis, fair and reasonable royalties for SEPs should take into account the actual and potential aggregate royalty demands for other SEP's. The result of such consideration is context dependent.

Dispute Resolution:

Disputes related to SEPs between two parties, should be settled by involvement of other players in the SSO including both, other SEP owners and licensees. Injunctions should be a last resort and are almost never a suitable remedy in cases pertaining to SEPs.

Nobody can implement a standard without implementing the real (taking into account over declarations) SEPs associated with that standard. If a product is to meet the requirements of the standard, it is not possible to design around it, the implementer therefore being 'locked-in'. This puts SEP holders in powerful positions because, if the patent is valid and infringed, the SEP holder has the right under patent law to apply at Court for an injunction to stop the product being sold.

The ability of a SEP holder to threaten a good-faith implementer with an injunction distorts licensing negotiations to the detriment of that implementer. A rational implementer can be coerced into accepting to pay higher-than-reasonable royalties just to avoid the risk of being barred from selling its product.

An owner of a SEP who has voluntarily committed to provide licenses to its SEP is acting unfairly, and is reneging on its FRAND commitment, when threatening such an implementer with an injunction. Good-faith implementers who are willing to license the SEP they use should not be faced with that risk. Simply asserting defences, questioning the validity or essentiality of SEPs, or asserting counterclaims should not mean that a potential licensee is acting in bad faith or is an 'unwilling' licensee.

A SEP holder must not be allowed to seek or enforce an injunction or other exclusionary remedies in relation to that SEP except in extremely limited circumstances, and that the grant or denial of an injunction should be subject to equity.

Some general principles are listed below that may be useful help in the dispute resolution process.

A. Gatekeeper function by the Indian SSO

One recommendation in this regard is to weed out poor quality unnecessary patents from the standard database. This may be categorized under a gatekeeper function where participants themselves weed out patents that are invalid (under laws of specific jurisdictions), not essential, not infringed or not enforceable. Poor patent quality exacerbates the problem of abusive licensing practices with SEPs.

There are multiple studies that reflect the trend of over-declaration of SEPs. Similarly, there are several studies that “in the laboratory of the court”, a very small percentage of SEPs turn out to be valid, essential, infringed, and the patent is enforceable. For example, in the 2014 project initiated by the European Commission, SEPs have been found more likely to be litigated than patents that are not claimed to be essential to a standard.¹⁵

In a study conducted by Jurata and Smith on success rate of SEPs in litigation, the authors examined a set of 58 declared SEPs that went to judgment in litigation since 2009 and found that only 7 (12%) had been found valid and infringed, with the remainder found invalid (18), not infringed (17), withdrawn by the SEP holder (14), or otherwise dismissed (2)).¹⁶

Similarly, in a study conducted by Graham and Zeebroeck, of patent litigation outcomes in France, Germany, Spain, the Netherlands, and the United Kingdom between 2000 and 2010, concluded that in cases where at least one invalidity defence was raised, the defendant succeeded 31% of the time in obtaining a finding of invalidity (i.e., all claims challenged were held invalid). In another 20% of such cases, the defendant succeeded to some extent in challenging validity (partial success). Finally, in 49% of the cases studied, an invalidity challenge was entirely unsuccessful and the claims were held valid.¹⁷

¹⁵ See EUROPEAN COMMISSION ENTERPRISE AND INDUSTRY DIRECTORATE-GENERAL, PATENTS AND STANDARDS: A MODERN FRAMEWORK FOR IPR-BASED STANDARDIZATION (2014), *available at* ec.europa.eu/DocsRoom/documents/4843/attachments/1/translations/en/renditions/pdf at page 125

¹⁶ J. Jurata, Jr. and D. Smith, *Supra* note 10

¹⁷ Stuart J.H. Graham & Nicolas Van Zeebroeck, *Comparing Patent Litigation Across Europe: A First Look*, 17 STAN. TECH. L. REV. 655, 694-695 (2014), *available at*

A recent study focusing exclusively on German validity patent litigations found even lower rates of validity. The authors examined nullity decisions of the German Federal Patent Court and the German Federal Court of Justice from 2010 through 2013 and found that only 20.92% of patents challenged as invalid were judged fully valid, while 43.62% were found fully invalid, and 35.46% were found partially invalid.¹⁸ This is profound, as the burden of proof to invalidate in Germany is strict proof standard!

India also has a few such examples. The Ram Kumar, Bharat Bhogilal Patel, case is one such instance where before being invalidated on various grounds, the patentee was able to extract crores of Rupees from the market.¹⁹ These instances highlight the reason why no preliminary injunction should issue in the matter involving patents.

Hence a gatekeeper function could be invoked in the Indian SSO.

B. Licensing terms should be made more transparent

These details could include, but not be limited to:

- the royalty rates for essential patent licensing including whether it is proposed to be a fixed price per unit or a percentage royalty;
- if it is an ad valorem (i.e., percentage royalty), then the company should disclose:
 - the basis upon which the royalty is to be calculated;
 - whether there is to be a maximum monetary amount of royalty (i.e., a cap);
 - whether there is a minimum monetary amount of royalty (i.e., a floor) - any territorial restrictions that may be imposed;
 - any branding restrictions that may be imposed;
 - any grant-back requirements;

<http://journals.law.stanford.edu/sites/default/files/stanfordtechnology-law-review/online/patentlitacrosseurope.pdf>

¹⁸ Peter Hess, Tilman Müller-Stoy & Martin Wintermeier, Sind Patente nur “Papiertiger”? [Are Patents merely “Paper Tigers”?], available at

http://www.bardehle.com/uploads/files/Patent_Papiertiger.pdf

¹⁹ See initial press coverage on the issue

<http://www.livemint.com/Companies/64vk1wINDEaDtxkjlKpuJK/Dual-SIM-dispute-highlights-flaws-in-India8217s-patent-pr.html>, and also see order revoking the patent <http://www.ipabindia.in/Pdfs/Order-140-2012-ORA-%2017-2009-PT-CH%20and%20ORA-31-2009-PT-CH.pdf>

- the types of products which will, and will not, be licensed.

C. Defining Fair and Non-Discriminatory for easy interpretation

- Declarants should make available licenses at any place in the value chain where the patents may be infringed.
- FRAND should not mean that a patent holder can license market participants at certain supply chain market levels, but refuse to license market participants at other market levels.
- FRAND should not mean that a patent holder can require licenses for sales of end-products in the value chain, and yet grant licenses at the same ad valorem rate but with a relative lower actual cost at other levels of the supply value chain.
- A key principle of the policy should be to ensure that buyers of components which must use essential patents have commercial freedom to choose which suppliers they want to use at any market level.

D. Reasonable - Defining the scope of being 'reasonable'

- The royalty must reflect the value of the contribution of the essential patents to the relevant parts of the end product which is being sold, and the relevant technology that is being licensed.
- Essential royalty rates should be based on the smallest patent practicing unit.
- If the essential patent holder intends to charge license fees only at the end-product level, then this fact should be clearly stated during the standard setting process, together with the relevant licensing terms so that there can be commercial certainty with respect to the implementation cost of the standard.

E. Independent assessments of declarations of essentiality

- Steps should be taken to ensure that there is an independent assessment by the SSO to determine whether a patent is essential to a particular standard, and which part of the Standard.
- Holders of essential patents should be required to declare which patents (by number and territory) they assert are essential and update the SSO public databases on a regular monthly basis.

- The SSO's should put in place procedures and systems to enable easier searching of the SSO databases by the public and prospective licensees.
- The SSO's should maintain information about patents that are found by a Court not to be essential or invalid or not infringed.
- Holders of patents should be required to notify SSO's if a court finds a patent non-essential or invalid.
- Further, any declarations of essentiality by participants should:
 - specify the claims of the patents that are declared to be used by the standard, and
 - declare whether the particular section of the standard is mandatory or optional.

F. Obligations on SSO

- There should be an obligation on SSO's to provide in any IPR Policy that members of the SSO cannot withhold information regarding the relationship of their IPR rights to a proposed-standard and subsequently seek excessive fees for use of any essential patents.
- Any IPR Policy should state that it is incumbent on the members of the SSO to take affirmative steps to search their patent portfolios to ascertain whether they have essential patents that relate to the proposed standard. This search should take place, irrespective of whether the member has contributed to the particular standard.
- Any IPR Policy should provide that it will be an abuse of the IPR policy for a member to seek license fees for essential patents where the patent holder has participated in the standard setting process and where the patent application arises out of the standard in respect of which the patent application was made.

G. Transparency in determining royalty for SEPs:

1. Refusal to Deal with First Implementers Violates the FRAND Promise.

A refusal to deal with implementers at lower level of the value chain in the industry is also incompatible with the promise to license on FRAND terms. The value chain may be summarized as:

Chipset Designer → Chipset Manufacturer → OEM/ODM → Product Brand Owner
→ Distributor → Customer

Some SEP owners, simply skip going to the chipset manufacturer, and reach to the Brand Owner to extract higher amounts because of the value added at subsequent stages. This is not only unreasonable, but a violation of the FRAND promise. A complete product that can implement the standard and available commercially is the chipset. Refusal to deal with or license chipset manufacturers is an abuse of competition law.

2. FRAND Calculation Must Take Into Account Multiple Factors.

FRAND calculations are based on multiple set of factors, but in principle, it should be based on “value of the patented invention before it became incorporated into the standard”. And the value should also keep into mind the aggregate impact of any individual FRAND royalty on the licensee and other implementers (*i.e.*, royalty stacking). This is because a licensee has to factor in not just one demand from a licensor but from multiple licensees.

Similarly, if royalty has been obtained elsewhere in the value chain, the same should be reflected in the demand. For example, mobile operators are separately licensed by SEP owners. This may be done by a Technical services contract within a Multi-Service Operator Contract. SEPs are also used by the Operator as both a base-station and handset must conform to the same norms as provided in a standard.

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As outlined in the TRAI paper, some courts / sectoral regulators have given recognition to the concept of the “smallest salable patent practicing unit” to focus royalty analyses on the patented invention. This approach avoids attributing to the patentee any value associated with a particular patent’s inclusion in a standard, and importantly helps avoid awarding to the patentee any extra royalties related to the contributions and innovations of others (*i.e.*, marketing and manufacturing investment, component choices, other patented technologies, brand value, etc.).

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3. FRAND should mean Fair and Reasonable and Non-Discriminatory to All

Many standards setting organisations provide in their intellectual property rights policy (IPR Policy) that SEP's shall be available for license by any company wanting to manufacture and sell equipment.

However, some SEP holders say they will only grant licenses at the end-product level, presumably in the hope that they can tax a much larger royalty base than just the price of the component supplying the patented functionality. Some SEP holders even seek royalties from users of such end products; this has gone as far as demanding royalties from coffee shops, restaurants, or hotels that offer WiFi-based wireless connectivity to their customers. When inappropriately seeking royalties only from parties at the higher end of the value chain, SEP owners are potentially rewarded for innovations that have nothing to do with their SEPs.

The SEP holder seeking FRAND compensation for its valid and infringed SEPs should receive the same royalty regardless of where it licenses in the supply chain. For example, if the SEP's value is X, that value remains the same even if the component incorporating the SEP is bundled in a complex multifunction device or if applied in an end-user application.

SEP holders breach their FRAND commitment when they refuse to license implementers simply because of their position in the product supply chain. Such refusals violate the basic commitment to license on a non-discriminatory basis. Tolerating discriminatory refusals to license threatens to undermine incentives for a wide variety of standard-setting participants, who will be prevented from licensing the standard they helped to develop.

Therefore, holders of FRAND-encumbered SEPs should offer licenses on fair and reasonable and non-discriminatory terms to all companies, organisations, and

²⁰ See *supra* note 8.

individuals at all levels of the supply chain of an end product who implement, or wish to implement, the relevant standard, in accordance with the terms of the applicable IPR Policy of the relevant standards setting organisation.

X---X---X---X---X