

ERICSSON'S RESPONSE TO FTC'S REQUEST FOR COMMENTS (Standard Setting Workshop, Project No. P111204)

INTRODUCTION

Telefonaktiebolaget LM Ericsson ("Ericsson") welcomes the opportunity to provide comments to the Request for Comments by the Federal Trade Commission (FTC) regarding the treatment of patented technology included in standards by Standard Setting Organizations (SSOs).

Before providing replies to the FTC's specific questions, we would first like to emphasize that the development and promulgation of technology standards generates important benefits for consumers, including improved device interoperability, faster roll-out of new technology, lower prices, enhanced product quality and increased innovation. The current processes employed by SSOs, requiring their members to pre-disclose potentially essential patents and, most importantly, to commit to license such intellectual property on (F)RAND terms, have served the Information and Telecommunications Technology (ICT) industry well for many years. Due to the development of open standards and open interfaces, the ICT industry, in general, and the wireless telecommunications sector, in particular, have enjoyed a remarkable spread of ever-evolving technologies around the world in the last two decades, providing ever-more affordable means of communication to billions of people world-wide.

DISCLOSURE OF PATENT RIGHTS IN A SSO

- ***How do patent disclosure policies vary among SSOs? How do disclosure policies vary in their effectiveness of making SSO members aware of relevant patent rights?***

Whereas the intentional non-disclosure of relevant patent rights can harm the adoption of a standard, the SSO rules must be balanced so as to not force overly burdensome rules upon the industry; e.g., extensive search and analysis of a company's patent portfolio before and during participation in standardization activities. Most SSOs, like ETSI, take this into consideration. [See further comments below.]

- ***What considerations drive variation in disclosure policies? Why do SSOs adopt policies that may lead to incomplete disclosure of relevant patents, for instance by excluding patent applications from disclosure or by not requiring members to search their patent portfolios?***

This will, *inter alia*, depend upon the technology. In some sectors, standard-setting is relatively straightforward; for example, where the technology is limited in scope and static, and the patent ownership profile is known and predictable and relatively stable. The telecom sector, however, is characterized by complex, dynamic standards having broad technical scope, involving significant numbers of technology contributions and long evolution cycles over many years. In 3GPP¹, for example, tens of thousands of technical documents are submitted each year.

¹ 3rd Generation Partnership Project (3GPP)

In complex technology fields, such as the telecom sector, a broad disclosure obligation could easily result in a culture of excessive over-declarations by SSO members. Standardization of telecom technology is a continuously evolving process where important on-going R&D is carried out in parallel with the standardization process; thus, there is often a time-delay in identifying patents that may be essential to practice the standard. The draft specification of a standard is also continuously subject to change as the various parts of the standard are developed. It is therefore very unclear during the development phase which patents will ultimately read on the standards; *i.e.*, which patents will be essential.

In addition, patents have claims which generally determine how relevant the patent is to a standard. Most claims have complicated technical and legal language allowing more or less different interpretations even by qualified lawyers familiar with the technology of the standard. Before a patent is issued, the claims are always subject to amendment and any attempt to determine prior to issue whether or not the granted claims will be relevant will inevitably be associated with even more uncertainty. This, in combination with the fact that a patent applicant may, within reasonable limits, decide on the particular technical terms used in a patent application, makes it hardly possible to efficiently make computerized searches for relevant patent applications. Often, either a significant number of tentatively relevant patent applications are not retrieved, or a significant number of not relevant patent applications are retrieved, in a computerized search.

Imposing too extensive disclosure obligations, therefore, may lead to fewer industry participants in the standardization process since they will feel obliged to disclose hundreds of patents and patent applications, which at a very broad level might be essential but ultimately prove to be irrelevant. Furthermore, obliging SSO members to conduct patent searches would require an owner of many patents to assign significant staff resources to manual evaluation of the possible relevance of its patent applications to a standard. This would require unreasonable amounts of work and costs given the vast number of patents and patent applications held by many companies in the telecom sector.

The cumulative effect of too extensive disclosures by all the SSO members, together with an obligation to conduct a patent search, would be to make the patent landscape substantially more obscure.

The ETSI IPR policy addresses these issues in the following terms:

“4 Disclosure of IPRs

4.1 Subject to Clause 4.2 below, each MEMBER shall use its reasonable endeavours, in particular during the development of a STANDARD or TECHNICAL SPECIFICATION where it participates, to inform ETSI of ESSENTIAL IPRs in a timely fashion. In particular, a MEMBER submitting a technical proposal for a STANDARD or TECHNICAL SPECIFICATION shall, on a bona fide basis, draw the attention of ETSI to any of that MEMBER's IPR which might be ESSENTIAL if that proposal is adopted.

4.2 The obligations pursuant to Clause 4.1 above do however not imply any obligation on MEMBERS to conduct IPR searches.

4.3 The obligations pursuant to Clause 4.1 above are deemed to be fulfilled in respect of all existing and future members of a PATENT FAMILY if ETSI has been informed of a member

of this PATENT FAMILY in a timely fashion. Information on other members of this PATENT FAMILY, if any, may be voluntarily provided.” (Emphasis added)

These limitations on the obligation to make disclosures provide a workable system that provides SSO members with sufficient time (“a timely fashion”) to make a proper assessment as to whether or not their IPR might be essential for the standard.

- ***When SSO policies create a potential for incomplete disclosure of members’ patent rights, how else can members protect themselves against hold-up?***

Ericsson (together with two other industry participants) made a suggestion to ETSI a few years back (during the ETSI Ad Hoc Working Group work in 2005 -2006 on IPR) to address the issue of potential hold ups by obligating SSO members to pre-agree to a FRAND licensing commitment for all essential IPR. This obligation was meant to apply unless a member, within a certain reasonable time, makes a declaration of non-willingness to include certain proprietary IPR (*i.e.*, a negative declaration). This obligation was, even though not formally rejected, not adopted into the ETSI rules and companies therefore have to rely on the declaration rules, in combination with other legal means (*e.g.*, antitrust rules), to make sure hold-up situations do not occur.

Nevertheless, the current system with SSOs (*e.g.*, within ETSI) requiring their members to pre-disclose potentially essential patents, and most importantly to commit to license any such intellectual property on (F)RAND terms has, with a few exceptions, served the telecommunications world well. Due to the development of open standards and open interfaces, the ICT sector and the telecom business have enjoyed a remarkable spread around the world in the last two decades, providing affordable communication to billions of people world-wide.

- ***When have SSO patent disclosure policies been reviewed or amended? What prompted those reviews? What were the results of the reviews?***

[No comment]

- ***Are there mechanisms for an SSO to encourage disclosure of relevant patents or patent applications held by nonmembers?***

Yes; for example, the IETF IPR rules (RFC 3937) addresses this issue in the following terms:

6.1.3: If a person has information about IPR that may Cover IETF Contributions, but the participant is not required to disclose because they do not meet the criteria in Section 6.6 (e.g., the IPR is owned by some other company), such person is encouraged to notify the IETF by sending an email message to ietf-ipr@ietf.org. Such a notice should be sent as soon as reasonably possible after the person realizes the connection.

In IETF RFC 8979 there is the following clarification of the language in RFC 3979 on what to do in case of a notice to IETF:

Where Intellectual Property Rights have been disclosed for IETF Documents as provided in Section 6 of this document (RFC 3979), the IETF Executive Director shall request from the

discloser of such IPR, a written assurance that upon approval by the IESG for publication as RFCs of the relevant IETF specification(s), all persons will be able to obtain the right to implement, use, distribute and exercise other rights with respect to Implementing Technology under one of the licensing options specified in Section 6.5 below unless such a statement has already been submitted.

In the ETSI IPR Policy there is, in clause 6.1, a procedure for urging anybody holding an essential patent, and in 8.1.2 b) a procedure for urging a non member holding an essential patent, to undertake to license patents relevant to a tentative ETSI standard.

- ***What ambiguities concerning the scope of a disclosure requirement exist in SSO disclosure policies? Why do they persist? Would more clarity be beneficial in preventing patent hold-up?***

There is no specific answer applicable to the disclosure policies of all SSOs. In some cases, more clarity might be warranted, but it will not address the problem of relevant patents held by non members, nor would further clarity address the complex situations where full transparency is not possible.

Ericsson, however, does see the benefit of having SSO databases to separate between those essentiality declarations that are incomplete in so far as they do not include a full reference to the standard and the relevant part of the standard by the declaring party. SSOs could require declarations to be complete for better predictability.

What principles apply in judging whether a patent holder's conduct before an SSO is deceptive? What is the role of the SSO's patent disclosure policy in judging whether conduct is deceptive or unfair?

To our knowledge, language on this issue is not very common in SSO IPR Policies. The ETSI Guide on IPR², however, includes language on an intentional delay which, when proven, should be considered a breach of the IPR Policy which can be sanctioned by the General Assembly (by excluding the member).

Ericsson believes that the enforcement powers of the SSO should be limited to excluding members who are in breach of the rules; otherwise, the fact that an SSO (including its management) is comprised of its members means that any further enforcement powers could result in a substantial conflict of interest. Instead, conflicts are often dealt with by courts and other authorities when disputes arise between members (and between members and non-members).

- ***Does non-disclosure or lack of information about relevant patent rights subvert the competitive process of selecting technologies for standard or undermine the integrity of standard setting activities? How?***

There is a risk that this could occur, but perhaps even more the risk is that the standard setting could be undermined by companies not adhering to the policies of the respective SSO; e.g., by refusing to license on (F)RAND terms.

² ETSI Guide on IPRS, Section 2, Note 2-3

Predictability that members are to license on (F)RAND terms is needed unless they explicitly, and within a reasonable time, declare an unwillingness to have a certain proprietary feature adopted by the standard.

THE RAND LICENSING COMMITMENT

- ***Is a RAND commitment part of an enforceable contract between the SSO and the patent holder? Between the SSO members and the patent holder? Should non-members of the SSO who wish to use the standard be able to enforce the commitment?***

Depending on the different SSO rules, a (F)RAND commitment could be regarded as a contract to offer a license on RAND terms between an adopter of a standard and an essential patent holder making such an offer. This is however in most cases subject to reciprocity.

One of the major purposes of IPR policies with patent licensing on (F)RAND terms is to safeguard that the standard can be implemented, naturally by providing compensation on (F)RAND terms to the holder(s) of essential patents. A non-member has not committed to license its essential patents on (F)RAND terms. If a non-member would be entitled to license members' essential patents, even when refusing to license its own essential patents to members, the competition between members and non-members would be distorted.

Generally, a SDO can avoid any possible ambiguity on the right to a cross-license by having an IPR Policy allowing a holder of essential patents to optionally include in its IPR disclosure and licensing undertaking on RAND terms a requirement for reciprocity. [See the ITU/ISO/ISEC Patent Statement and Licensing Declaration Form, wherein the patent holder can tick a reciprocity requirement box]

In this context, Ericsson would like to emphasize that even if (F)RAND obligations could be enforceable through contract law, it is also important that competition law can be used. If one company that owns patents that are essential for a given standard imposes excessive and discriminatory terms on all licensees, downstream competition is restricted and all the licensees suffer loss, and all consumers and users of the products concerned suffer corresponding losses. These harmful economic effects are not contract issues, and could not be treated as if they were. Failure to enforce competition law on account of the existence of a contract would deny protection of consumers and other third parties and would evade the public policy objectives for competition law.

- ***Do RAND licensing commitments without accompanying disclosure commitments provide adequate protection against patent hold-up?***

In order to apply (F)RAND licensing rules, which includes reasonable compensation for the share of essential patents a patent holder owns, certain transparency of the patent landscape is needed. Patent declarations accompanied by relevant information (*i.e.*, includes a full reference to the standard and the relevant part of the standard to which the declared IPR are supposedly essential) are an important part of the (F)RAND licensing process. Moreover, this facilitates patent landscaping and thereby assists the court (and competition authorities) in applying the principle of reasonability when enforcing RAND commitments.

- ***Has any SSO provided guidance on how “reasonable” and “non-discriminatory” licensing terms should be judged for a RAND commitment? What is that guidance? Why do SSOs not provide more definition of RAND?***

SSOs' IPR rules do not explicitly specify what criteria must be met for royalty rates to be fair, reasonable and non-discriminatory. It is believed doing such would be impossible in the abstract; there are too many variables and unknowns for an *a priori* commitment of what is reasonable.

- ***Absent an SSO's definition or express limitations given by the patent holder in its commitment, by what standards should “reasonable” and “non-discriminatory” be determined? What principles should a court or tribunal look to in resolving a dispute between a potential licensor and licensee concerning whether proffered terms are RAND?***

As ETSI demonstrated in the context of the UMTS standard, the members of an SSO can establish consensus as to how (F)RAND should be defined in relation to a particular standard prior to its official adoption. For example, when WCDMA was provisionally selected in January 1998 for inclusion in the UMTS standard, ETSI members established the UMTS IPR Working Group in order to provide agreed guidelines for the (F)RAND licensing of UMTS essential patents. Following industry consultation, the UMTS IPR Working Group published recommendations which defined (F)RAND in the context of UMTS to require a reasonable (single digit) aggregate royalty rate to be divided among the holders of essential patents based on the equality of essential patents. Such a principle recognizes that if the royalty levels for a standard are cumulatively too high, they will adversely impact and may negate the economic benefits of standardization. It is, therefore, important when negotiating royalty rates that individual licensors take into account the cumulative royalty levels payable by licensees. A significant feature of any standard-specific definition of (F)RAND should, therefore, include the reasonable aggregate royalty rate range for standard compliant products.

- ***What evidence may be relevant in determining whether a proffered license is reasonable and non-discriminatory?***

As described above, it is Ericsson's view that to rely on comparison of *ex ante* and *ex post* licensing fees or *ex ante* disclosures when defining (F)RAND is unlikely to increase the effectiveness of the standard setting process for dynamic standards or result in competitive IPR level.

- ***Should a RAND commitment preclude a patent holder from demanding from users of the standard a cross-license for patents that are essential to practice of the standard? A license of nonessential patents?***

Ericsson does not believe that SSO rules themselves should address non-essential patents as they are not part of the relevant standard, but are proprietary features.

- ***If a patent holder that has given a RAND commitment enters into cross-licenses with some standards users, how should these be evaluated for purposes of determining whether terms it offers others are non-discriminatory?***

In cross-licensing, an evaluation should be made as to each party's share of essential patents (also other issues come into play such as geographical scope, if compensation is made up-front or as a running royalty, etc.).

- ***Should a RAND commitment preclude a patent owner from seeking in patent litigation a preliminary injunction against practice of the standard? A permanent injunction? An exclusion order in the International Trade Commission? How should courts and the ITC take a RAND commitment into account in these contexts?***

As there is a (F)RAND commitment, injunctions should not be allowed as a first means; *i.e.*, without even engaging in *bona fide* licensing discussions. The whole purpose of the (F)RAND commitment is that standard adoption should not be blocked (unless a user is unreasonably refusing to take a necessary license).

- ***Under what circumstances should a RAND commitment given by a patent holder bind later owners of the patent? What steps can or should SSO's take to ensure that a transferred patent remains subject to a prior RAND commitment?***

Ericsson believes that there should be a requirement on all IPR holders who provide a (F)RAND commitment to take all necessary measures to ensure that any company to which the IPR owner transfers its IPR is bound by that commitment. Such a requirement would improve the (F)RAND system and especially the problems associated with the increasing number of non-practicing entities who acquire essential patents with a view to obtaining substantial royalties that are inconsistent with (F)RAND terms.

ETSI has taken some steps; see, for example, the ETSI Guide on IPR, Clause 4.2 and the ETSI IPR Policy Clause 6.1, last paragraph, which states that:

"In the event a MEMBER assigns or transfers ownership of an ESSENTIAL IPR that it disclosed to ETSI, the MEMBER shall exercise reasonable efforts to notify the assignee or transferee of any undertaking it has made to ETSI pursuant to Clause 6 with regard to that ESSENTIAL IPR."

- ***Does reneging on a RAND commitment subvert the competitive process of selecting technologies for standards or undermine the integrity of standard-setting activities? How?***

Certainly; the standard setting system simply has to have the predictability and reliability of (F)RAND commitments being honored.

EX ANTE DISCLOSURE AND/OR NEGOTIATION OF LICENSING TERMS

- ***What has been the experience of those SSO's that require or allow ex ante disclosure of licensing terms? How frequently do ex ante disclosure of licensing terms occur? Why are ex ante disclosure of licensing terms not required or made?***

Ex ante disclosure of license terms may be useful in a relatively straightforward standard-setting context where the technology is limited in scope, and static, and the patent ownership profile is known or predictable and relatively stable. The telecom sector, however, is characterized by complex, dynamic standards having broad technical scope, involving significant numbers of technology contributions and long evolution cycles over many years.

Standard setting within the telecom sector involves the setting of requirements and identification of a multitude of technical problems which are solved by substantial R&D efforts conducted by a large number of different contributors. Thus, telecom standards are collaboratively created and built up over a long time-period (years or even decades) based on hundreds or even thousands of sub-technologies, each one of them possibly being subject to IPR, which means that the ownership of the essential patents will be spread across many patent owners. For example, there are some fifty companies that have claimed over 10,000 patents (and patent applications) essential to UMTS.

The telecom standardization is also a continuously evolving process where important on-going R&D is carried out in parallel with the standardization process. The number of essential patents granted to SSO members will typically remain at a relatively low level in the early years of the standardization process. Due to this process, it is difficult for patent owners to get a good understanding of which patents are essential to the standard and who owns them prior to the standard being adopted and first published. Many of the patents claimed to be essential may, for example, not be essential and the granted claims may be much narrower in scope than the scope of the claims applied for. Moreover, it may be the case that a third party has already invented the claimed technical solution (prior art) in which case no patent will be granted.

As a result, many licensors and licensees will not have a clear picture of the strength of the relevant essential patent portfolio relating to a given standard for a number of years after the first release of a standard. Typically, the bulk of essential patent declarations made in relation to a given release of a standard will only become granted patents some years after the release of the standard has been published. Moreover, it is typically the case that the first release of a telecom standard will be much more improved by intensive R&D over many years following the first release. Compare, by way of example, the first release of GSM in 1990 with EDGE, the most-developed version of the GSM standard that was released some nine years later.

In summary, *ex ante* disclosures will not work in complex technology areas such as the telecom sector with long evolution cycles where there are many patents/patent owners. Disclosure made in this context would not reflect any competitive process and could not therefore be equated to a negotiated rate achieved in arm's length negotiations prior to the adoption of a standard.

Furthermore, since unilateral *ex ante* disclosures only concern individual royalty rates, they could not guarantee that the cumulative royalty rate paid by implementers of the standard would be reasonable. In fact, experience shows that when a lot of individual rates are aggregated, the cumulative figure is unlikely to be commercially viable since companies will seek to maximize their *ex post* negotiating position by disclosing high royalty rates. This problem is exacerbated as the number of licensors grows and more and more individual rates have to be aggregated.

Support for this view is provided by the telecoms industry's experience with the NGMN IPR Initiative. Operators in the mobile telecoms industry sought to obtain an indication from essential patent owners as to what they would charge for licenses to use patents declared essential for fourth generation mobile systems. In July 2007, NGMN announced that it had launched an initiative to deliver more transparency and predictability towards IPR costs associated with next generation mobile technologies. The aim of the initiative was to reveal

indicative cumulative IPR costs for various standards in order to provide an early opportunity for technology customers to consider the IPR cost of potential next generation technologies in their decision-making process. The initiative required each participant to provide to an independent third party its main proposed licensing terms and conditions. Although the aggregate amount claimed is confidential, it is well known in the industry that the aggregate royalties claimed by the relevant IPR owners was wholly excessive and would be a substantial cost burden on both handset manufacturers and operators who wish to introduce higher quality services to consumers.

Thus, although at first sight *ex ante* disclosures of individual license terms (or *ex ante* negotiations of licensing terms) may appear attractive, they are not likely to lead to fair and reasonable licensing costs/royalty rates in complex standards such as in the telecom sector. Instead, they can actually back-fire, and end up being somewhat counter-productive, because they risk undermining commercial confidence in whole technology platforms that would otherwise be selected.

- ***How frequently do ex ante bilateral negotiations of licensing terms occur?***

Due to above described problem that many licensors and licensees will not typically have a clear picture of the strength or depth of the relevant essential patent portfolios relating to a given standard for a number of years after the first release of the relevant standard, *ex ante* bilateral negotiations do not often occur in the telecom sector.

- ***How frequently do ex ante multilateral negotiations of licensing terms occur? How are such negotiations conducted?***

See reply above.

- ***What factors affect a firm's decision to engage in, or not engage in, ex ante discussions or negotiations?***

See reply above.

- ***How does a patent owner's ex ante disclosure of licensing terms affect the process of choosing technologies for incorporation into the standard?***

[No comment]

- ***Has experience shown a difference between terms negotiated ex ante and terms negotiated ex post?***

[No comment]

- ***To what extent do concerns about antitrust liability deter ex ante disclosure or negotiation of licensing terms?***

[No comment]

- ***What considerations should shape a rule of reason analysis of joint ex ante license discussions or negotiations?***

As stated above, *ex ante* disclosure of license terms may be useful in a relatively straightforward standard-setting context where the technology is limited in scope, and static, and the patent ownership profile is known or predictable and relatively stable. These are situations where it is clear that contributor A owns all relevant IPR on its contribution and this is known, company B owns all relevant IPR on its contribution and this is known. Each company, simultaneously with their respective contributions, reveals its monetary compensation expectations. Such a situation could lead to an *ex-ante* auction which in return could lead to a predictable lower cost for the industry. However, these situations are very rarely (if ever) the case in complex technologies such as found in the telecommunication sector. On the contrary, as described above, the *ex ante* licensing discussions could instead lead to the opposite and undesired scenario where costs are instead increased.