

Response to DG Enterprise Questionnaire

Patents and Standards

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Preface

Samsung Electronics Co., Ltd. (“Samsung”) is a global consumer electronics and technology company. Samsung’s products range from end-products such as visual display products, digital appliances, printing solution products, health & medical equipment, mobile communications devices, telecommunication network equipment to component-products such as memory and system LSI solutions (for further details, see website: www.samsung.com).

Samsung has deep roots and history in Europe. Samsung employs roughly 19,000 people in Europe, 2,500 of whom hold R&D-related positions. Samsung has had European presence since 1982 and currently has 41 sites spread across the European Economic Area, including 4 R&D research center locations in the UK, Poland, Germany and Spain.

Samsung has been one of the most committed R&D spenders in the world. In 2013, Samsung spent almost EUR 10billion, which amounted to 6.4% of its total revenue. Samsung has been named as the No.1 R&D spender among global IT companies and No.2 overall for 2014. This reaffirms Samsung’s commitment to R&D and bringing innovative products to its consumers.

Samsung’s heavy investment in R&D is also reflected in the number of patent applications before the European Patent Office. In 2012 and 2013, Samsung headed the list of the largest applicants before the EPO.¹ In terms of the number of published granted patents, Samsung is only second to Robert Bosch in Europe.² Samsung is also an active and long-standing contributor to all the major Standardization Organizations. Samsung appreciates the benefits of the Standardization process and closely follows the ongoing policy discussions relating to standard-related patents around the world.

While Samsung considers it important to maintain its intellectual property rights, Samsung deploys its patent assets primarily in a defensive manner to focus on developing the best products and technologically advanced solutions. The response to this Patents and Standards Questionnaire (“Questionnaire”) should be read with this in mind – Samsung is inseparably both an innovator and implementer of Standard Essential Patents (“SEPs”). Samsung strives to promote a balanced approach to SEPs and grapples with the real-world issues surrounding the greater standard-related IPR debate.

¹ <http://www.epo.org/about-us/annual-reports-statistics/statistics/top.html>.

² <http://www.epo.org/about-us/annual-reports-statistics/statistics/patentees.html>.

Samsung thanks the Commission for this opportunity to comment on the Questionnaire and responds to Issues 3, 4, 5 and 6 noted in the Questionnaire. [CONFIDENTIAL]

3. Patent transparency seems particularly important to achieve efficient licensing and to prevent abusive behaviour. How can patent transparency in standardization be maintained/increased? What specific changes to the patent declaration systems of standard setting organizations would improve transparency regarding standard essential patents at a reasonable cost?

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

Q 3.3.4 Essentiality check (in particular): Depending on your answer to the above question, how can the essentiality check be performed in practice? What are the average cost of checking essentiality (for third parties) and what could be done to minimize these costs? Do you see a set-up of such a check that is particularly cost and time efficient? How can it be avoided that this check creates incentives for not respecting the declaration obligation?

Transparency as defined in the Questionnaire is critical to ensuring efficient functioning of the Standardization process both *ex ante* and *ex post*. Without some meaningful way of knowing that patents submitted as being essential to a Standardization Organization are indeed essential (or close to being essential), potential for abuse will remain. For example, many in the industry seek to gain advantage by touting the sheer number of declared essential patents in a licensing context. The current system tolerates gamesmanship by those purporting to possess assets that relate to Standards when in fact their declared assets have only trivial nexus to such Standards. Many engage in the so-called “numbers game” by publishing self-sponsored studies listing the number of SEPs in the industry and seek to show that their R&D prowess can be equated with the number of SEPs they hold. Such publications are often misleading. Extraction of value through engaging in such “numbers game” is unfair and undermines the overall Standardization process.

It is understood that Standardization Organizations are voluntary private organizations. Imposing the costs associated with independent essentiality review may limit participation in the Standardization Organization. Imposing the costs associated with independent essentiality review on the submitter may also disincentivize disclosure. Moreover, Standardization Organizations cannot discuss essentiality during their meetings due to competition law concerns.

However, in our view, more can be done, in particular by way of self-regulation. Standardization Organizations can seek to mandate the submission of further details regarding why the declared assets may be considered essential when a declarant submits the specific declaration covering the asset at hand. From both the cost and time efficiency point of view, the declarant is best positioned to articulate why the technology embodied in the declared asset should be considered essential under the pertinent language of the IPR Policy of the Standardization Organization.

More transparency could be achieved on the issue of SEP ownership as well. Many of the SSOs (e.g., ETSI) already maintain a public IPR database. SSOs can do more by imposing a duty on members to keep such IPR databases current and especially mandate an update of the registry in the event of a transfer of SEP assets to another party. Such updates on public registries can provide notice to potential licensees and the members of the public at large to keep all interested parties informed.

Transparency checks extending beyond the issue of essentiality may be overreaching and outside the purview of what Standardization Organization are set up to do. For the issue of validity, for example, national patent offices are best situated to determine the novelty and non-obviousness of the technology embodied in a given patent.

4. Patents on technologies that are comprised in a standard are sometimes transferred to new owners. What problems arise due to these transfers? What can be done to prevent that such transfers undermine the effectiveness of the rules and practices that govern standardisation involving patents?

Q 4.1.3 Non-practising entities: Have you encountered transfers of standard essential patents to entities that do not produce or market products including the technologies covered by these standard essential patents? What particular consequences have you observed?

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

In the case of any transfers of SEPs, the parties must ensure that any and all FRAND undertakings given by the transferor are fully binding on the transferee and in each case enforceable by third parties wishing to practice the Standard. Otherwise, the pro-competitive effect of the FRAND undertakings would be circumvented by a transfer of the relevant SEPs.

There are IPR Policies which mandate such transfer of FRAND obligations when an SEP is transferred. For example, Clause 6.1bis of the ETSI IPR Policy since March 2013 states as follows:

“FRAND licensing undertakings made pursuant to Clause 6 shall be interpreted as encumbrances that bind all successors-in-interest. Recognizing that this interpretation may not apply in all legal jurisdictions, any Declarant who has submitted a FRAND undertaking according to the POLICY who transfers ownership of ESSENTIAL IPR that is subject to such undertaking shall include appropriate provisions in the relevant transfer documents to ensure that the undertaking is binding on the transferee and that the transferee will similarly include appropriate provisions in the event of future transfers with the goal of binding all successors-in-interest. The undertaking shall be interpreted as binding on successors-in-interest regardless of whether such provisions are included in the relevant transfer documents.”

As noted by the Commission, the Guidelines on the applicability of Article 101 TFEU to horizontal co-operation agreements (OJ [2011] C11/1) have since 14 January 2011 provided that standard-setting agreements should, in order “to ensure the effectiveness of the FRAND commitment”, impose a requirement that “all participating IPR holders who provide such a commitment [...] ensure that any company to which the IPR owner transfers its IPR

(including the right to license that IPR) is bound by that [FRAND] commitment, for example through a contractual clause between buyer and seller” (paragraph 285).³

It is an unfortunate reality that many companies attempt to circumvent FRAND obligations by divesting some SEPs to non-practicing entities (“NPEs”), while continuing to license other portions of their portfolio themselves. The NPE then is able to demand additional (and often exorbitant supra-FRAND) payments without regard to the FRAND obligations which attached to those patents in the hands of the previous owner. [CONFIDENTIAL] When a sizeable portfolio of SEPs is divided and transferred into separate portfolios, those portfolios taken together cannot lawfully be licensed for higher royalties than would have been possible but for the division and partial transfer. The sum of the parts cannot be greater than the whole. Otherwise there is a significant risk of excessive prices, royalty stacking, and raising the costs of rivals of the original owner of the now separate portfolios. However, it is becoming more prevalent that owners of SEPs are seeking to maximize their patent revenues by dividing their portfolios and transferring SEPs to NPE privateers. These NPE privateers in turn use litigation or the threat of litigation to extract additional royalties from the industry and return a portion of those royalty proceeds to the original SEP transferor. These types of NPE-privateering arrangements are designed to extract supra-FRAND revenues for the original owners and often target competitors without any risk of reputational harm or countersuit. Such arrangements undermine the public policy behind the FRAND commitment. Samsung proffers that such conduct is in breach of the obligation under Article 101 TFEU and many of the existing IPR Policies of Standardization Organizations.

In order to safeguard the interest of the public at large, to guarantee the actual transfer of FRAND obligations, and to avoid unreasonable costs and royalty stacking, specific requirements must be put in place when transferring SEPs. Such requirements could be provided through legislation or enforcement. [CONFIDENTIAL]

FRAND must mean FRAND even in the face of change of ownership. Accordingly, consideration of *ex ante* value of the patented contribution, total cumulative royalty burden and individual licensing history of the patents at issue, where practicable, should be paramount in any consideration of future FRAND royalty.

³ [http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52011XC0114\(04\)&from=EN](http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52011XC0114(04)&from=EN)

5. Patent pools combine the complementary patents of several patent holders for licensing out under a combined license. Where and how can patent pools play a positive role in ensuring transparency and an efficient licensing of patents on technologies comprised in standards? What can public authorities and standard setting organizations do to facilitate this role?

Q 5.1.1 Target areas: What are the situations/external factors which render a patent pool useful? Are you aware of specific standards for which a patent pool would be useful but where there has been a failure to create one?

Q 5.2.2 Incentives for pool participation: How can this balance be influenced positively? What incentives can be provided by public authorities and/or standard setting organizations to increase patent pool participation?

Patent pools can play a positive role in ensuring transparency and can be an efficient licensing mechanism. Samsung finds that patent pools are most useful when all the major SEP stakeholders are members of a given particular pool for that standard [CONFIDENTIAL]. The advantage of patent pools is that procedures and rules are clearly defined upfront among the contributors to the pool, which limits the risk for abuse in the event of commercial disputes. For example, patent pools generally have pre-defined terms and conditions in place for access to the pool, as well as specific procedures and processes in case alleged infringers refuse to take a license. The potential royalty burden on the licensee can also be readily discerned as patent pools often cap the royalty amount a licensee needs to pay.

Many patent pools, however, lack the critical mass and often do not include the most pertinent SEP holders for certain types of technology. For this reason, Samsung finds the current pool landscape to be often unattractive and not fit for participation. Furthermore, patent holders who seek to maximize their licensing income often choose not to participate and benefit from the more risk-averse solution that patent pools offer. Although the risks and costs in seeking remuneration may be higher when pursuing infringers on an individual basis, patentees will also be able at times to negotiate more favorable terms and conditions, and enhance their licensing income beyond what would be possible through patent pools. While there are incentives that can be offered to encourage participation in a patent pool, Samsung finds that such measures have had limited success. It is also a cause for concern that multiple pools are in existence for the same standard [CONFIDENTIAL]. More than one patent pool operating in the same technology space can result in royalty stacking.

If the Commission wishes to encourage the use of patent pools, it should therefore bear in mind that patent pools need to achieve critical mass to allow for efficient licensing. In such cases, safeguards should be put in place to ensure that patent pools will not start behaving as “patent trolls” and seek to maximize licensing income beyond what is FRAND. Samsung

proffers that mandating patent pools to disclose their payment structure upfront and placing a cap on the annual royalty amount due to be paid by a potential licensee would also help in increasing the popularity of patent pools in the industry. Further, in technological fields where the Commission deems it critical for ensuring public safety and health (e.g., telecommunications standards, medical devices field), public funding sources should be identified for setting up patent pools in those fields.

6. Many standard setting organizations require that patents on technologies included in their standards are licensed on "fair", "reasonable" and "non-discriminatory" (FRAND) terms, without however defining these concepts in detail. What principles and methods do you find useful in order to apply these terms in practice?

Q 6.1.1 Notions "fair" and "reasonable": How, in your view, should the terms "fair" and "reasonable" be understood? Which of the above methodologies do you consider particularly appropriate, which other methodologies do you find important and what could be an appropriate mix of references?

Q 6.1.3 Time required for negotiations: In your experience, how long does it take, on average, to negotiate FRAND terms? What does the length of negotiations depend on? Is it more or less difficult/fast to reach an agreement on FRAND terms and conditions for standard essential patents licenses compared to other similar patent licensing deals?

Q 6.6.1 Definition in practice: In your opinion, what is the best definition of the non-discrimination principle? What aspects of non-discrimination do you find important? Is there sufficient clarity on what non-discrimination means and how it is to be applied in practice? Does the non-discrimination principle relate to the initial offer of the patent holder or the actual outcome of negotiations? Does it relate to an offer isolated to a single standard or to multiple standards? Do you consider that the non-discrimination principle creates obligations on the (potential) licensee?

Samsung and other technology companies have committed to license SEPs on terms that are Fair, Reasonable, and Non-Discriminatory. Although the legal definition of FRAND is in a state of flux, Samsung understands the commitment to impose an obligation to negotiate in good faith towards a license (whether unilateral or a cross-license) and engage in a constructive negotiation process. For clarity, the FRAND commitments extend not just to negotiation of a royalty, but to all terms and conditions of the license. FRAND terms are not, however, a uniform set of terms and conditions. Because licensing negotiations involve different companies, with patent portfolios of different strengths and with different business models and goals, what constitute FRAND terms and conditions will depend on the particular facts and circumstances of each negotiation.

Notwithstanding the unique circumstances of each negotiation and the case-by-case nature of the FRAND determination, the following elements ought to guide the process:

- The IPR policy of the relevant SSO;
- The commitments made to that SSO as it relates to the IPR in question;
- The value that the functionality of the claimed invention in a given SEP contributes to the value of the relevant functionality of the smallest saleable unit that practices the

claims of the SEP. Where small elements of multi-component products relate to the claim invention embodied in the SEP at hand, calculating a royalty on the entire end-product carries a risk that the patentee will be improperly compensated for non-infringing components of that product;

- Further, where the smallest saleable unit is, in fact, a multi-component product containing several non-infringing features with no relation to the patented feature of the SEP, further apportionment must be done to estimate what portion of the value of that unit is attributable to the patented technology;
- The value that the claims of the SEP contribute to the smallest saleable unit that practices that claim, in light of the value contributed by all SEPs for the same standard practiced in that smallest saleable product. The importance of the SEPs relative to the pertinent standard as a whole ought to be considered;
- The relevance and importance of the technology covered by the IPR to be licensed prior to adoption of the relevant standard(s) (i.e., the *ex ante* incremental value of the innovation(s) covered by the IPR) ought to be considered;
- Existing licenses covering use of the claims of the SEP, where such licenses were not obtained under the explicit or implicit threat of an injunction, and where the circumstances and resulting licenses are otherwise sufficiently comparable to the circumstances of the contemplated license;
- Whether the parties had a prior license for the same, or a similar, portfolio of IPR. If so, what the terms and conditions of that license were, and what, if any, relevant circumstances have changed since that license was negotiated;
- Whether the licensor has previously offered or granted to other parties a license for the same, or a similar, portfolio of IPR – and, if so, whether the relevant circumstances as to the terms and conditions were different from the current circumstances;
- The discount rate appropriate for lump sum payments or fully paid-up licenses;
- The amount of royalties demanded relative to the total royalty burden for the to-be-licensed products.

The foregoing list is exemplary and non-exhaustive: some factors may not be applicable to a particular negotiation, and other factors which are not listed may be significant. In addition, some factors may have particular significance in a given negotiation, but less significance in another. But consideration should be given to every factor, and industry participants should generally be able to explain their negotiating position in relation to each factor (including why a particular factor is irrelevant, if it is).

The touchstone of FRAND licensing efforts should be reasonableness. The positions taken should be reasonable, and so should the conduct of the negotiations. In a typical case, this means, among other things, that:

- Licensing offers and correspondence should be responded to in a reasonable period of time;
- Materials provided by the other side should be considered;
- Appropriate compromises should be made;
- Negotiations should be allowed appropriate time to develop.

One way of carrying out the reasonableness assessment would be to consider, at each step in the negotiation, whether a neutral third party would understand the rationale for a particular conduct at that point in the negotiation and find it reasonable. In general, given the complexity of negotiating licenses to SEPs, it is not uncommon for the negotiations to be lengthy.

Notwithstanding a party's good faith efforts to negotiate FRAND licenses to essential IPR, however, there may be instances in which the negotiating parties reach an impasse or the counter-party demonstrates its unwillingness to negotiate in good faith towards a FRAND license. In those circumstances, alternative mechanisms for arriving at FRAND licensing terms – such as arbitration or court adjudication – should be considered, if the parties can agree that as a reasonable way to break a deadlock. However, given the difficulties with large numbers of potentially invalid or non-essential patents declared essential to some SSOs (see our response to Q3 above), imposing such solutions on a portfolio basis, without the consent of both parties and without a realistic and practical means of dealing with the impact of over-declarations and invalidity, would give rise to concern.

Furthermore, in addition to reasonableness, FRAND also encompasses a principle of non-discrimination. This means that a patent holder who participates in standard-setting activities and makes a FRAND licensing commitment is implicitly saying that it will license the patent claims that must be used to implement the standard to *any licensee* that is willing and able to comply with the licensing terms embodied in the commitment. Samsung therefore also supports the principle laid out in paragraph 285 of the European Commission's Horizontal Cooperation Guidelines, which state that "In order to ensure effective access to the standard, the IPR policy would need to require participants wishing to have their IPR included in the standard to provide an irrevocable commitment in writing to offer to license their essential IPR to *all third parties* on fair, reasonable and non-discriminatory terms [*emphasis added*]".