

To the European Commission

COMMENTS BY NOKIA CORPORATION TO THE REVIEW OF THE HORIZONTAL RULES BY THE COMMISSION

Nokia welcomes besides the new policy also the opportunity to comment on the draft Horizontal Guidelines published by the EC Commission on 4 May 2010.

The Nokia comments focus predominantly on the issues raised in the section 7 of the draft Horizontal Guidelines (Standardization Agreements).

1. HIGH-LEVEL SUMMARY OF THE NOKIA COMMENTS

- Nokia believes that the Commission has succeeded well in communicating a balanced policy, which is neutral and seeks to safeguard that the benefits of standardization are passed on to the entire community while at the same time ensuring that patent holders get a fair and reasonable compensation (at maximum FRAND) for their innovations (Section 2).
- Nokia shares Commission's view that effective IPR policies are needed to prevent patent hold up and standards related abuses.
- Nokia supports the white list approach adopted by the Commission for standard-setting (Section 3).
- While Nokia generally supports ex ante disclosure of essential IPRs, Nokia has some reservations what comes to disclosing early stage patent applications that enjoy confidentiality protection by law. The problematic could be resolved by potential IPR holders providing general FRAND commitments for any future essential IPR in the early phase of standardization (Section 4).
- The guidance on what constitutes abuse and how FRAND should be determined is informative and facilitates uniform application of the EC competition law by national courts. It may also advance amicable settlements and reduce litigation. For complicated standards like telecom standards FRAND is the only workable solution to prevent patent hold up. Clarification in this regard is thus very helpful (Section 5).
- Nokia would welcome a statement in the Draft Guidelines acknowledging that injunctions under essential patents may have negative effects on the conditions of competition under certain circumstances (Section 5.2).

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- The guidelines could note that besides the individual rates also the aggregate royalty burden can be a concern in industries like telecoms (Section 5.1).
- The guidelines could be more explicit in stating that the FRAND compensation for an individual patent should be defined considering the IPR's relative value of contribution to the standard at issue taking into account all other IPRs relevant to that standard and the aggregate reasonable royalty (Section 5.1).
- It could be counterproductive to exclude cost-based methods from the scope of "acceptable" methods (Section 6.1).
- Ex ante value of the relevant IPR can sometimes be evidenced also by means other than "fees charged" and Nokia proposes amending the Draft Guidelines accordingly in order not to exclude other reliable sources of evidence (Section 6.2).
- Ex ante announcements of most restrictive licensing terms are not well suitable to the telecoms environment, which is often characterized by complex, dynamic standards having broad technical scope, involving huge numbers of technology contributions and long evolution cycles over many years (i.e. standard development). (Section 6.4)
- To safeguard that the disclosures of most restrictive licensing terms are not abused to fix and increase the value of IPR the Commission could in the guidelines further explain the difference between the actual ex ante value and ex ante disclosure of maximum fees (a unilateral statement of the maximum value, not evidence of the value) (Section 6.4).
- To address the concerns relating to the excessive cumulative royalties in industries like telecoms Nokia would welcome a statement that disclosure by companies, in particular licensors, of what they regard as the maximum commercially viable aggregate rate for a given standard is considered pro-competitive (Section 6.4).
- It could be informative to include a statement in the guidelines that the EC competition law is applied to competition restrictions having effects in the EU. This applies also to standard-setting, even if the relevant organizations would not be located in the EU (Section 7).
- The Draft Regulations appears to suggest that R&D agreements will only be compliant if the parties make a full disclosure of all relevant background IPR. However, it appears impossible to comply with this condition (Section 8).

2. A BALANCED POLICY

Nokia believes that the Commission has succeeded well in communicating a balanced policy, which is neutral and seeks to safeguard that the benefits of standardization are passed on to the entire community while at the same time ensuring that patent holders get a fair and reasonable compensation (at maximum FRAND) for their innovations.

Nokia notes that the primary purpose of *patent system* is to promote innovation by providing patent protection in exchange for public disclosure of innovations – which disclosure encourages competition. Whereas the primary purpose of *standardization* as a form of horizontal cooperation is somewhat different i.e. to enable interoperability of numerous different technologies, products and manufacturers. In standardization, industry participants inevitably make choices that affect the position of IPR holders in

different ways – some positively when a specific IPR becomes part of the standard and some negatively if a specific IPR does not become part of the standard. This is well reflected e.g. in the Commission's statement that the FRAND value of the standardized technology could *ex post* be determined by observing the value that the essential IPR had in the *ex ante* competitive situation – when competing technologies still existed as an alternative for the industry (Para 284).

3. WHITE LIST APPROACH ON STANDARD-SETTING AGREEMENT

Nokia generally supports open, transparent and non-discriminatory (unbiased) standard-setting procedures and welcomes the white list approach adopted by the Commission in the Draft Guidelines (paras 276 onwards).

While it is good to allow the stakeholders and standardization organizations to adopt their own rules that best suit their individual purposes, it is also important to provide clear guidance on what would generally be regarded as pro-competitive processes in standardization that also effectively seek to prevent abuses of the system.

While self-regulation by the industry in certain issues and forums has been successful it has not in all situations been able to resolve all concerns. This has in particular been the situation with questions that typically tend to divide the views of the industry. Consensus-based decision-making by the organizations has often resulted in the adoption of rules that reflect compromises and that do not necessarily impose strict obligations on the members to act in a certain way (e.g. instead of having an obligation to transfer FRAND comments along with patents the rules may just encourage the members to do so).

Nokia would welcome if the Commission encouraged the standardization organizations now to review their rules to ensure that they provide the same or equivalent level of comfort as has been described in the white list. More harmonized rules would increase predictability and legal certainty and facilitate more efficient standard-setting possibly reducing litigation.

4. EX ANTE DISCLOSURE OF ESSENTIAL IPR

Para 281. ... Thus, the IPR policy should require good faith disclosure of those intellectual property rights (Footnote 94: This includes, e.g., patents and patent applications [emphasis added]) that might be essential for the implementation of a standard under development before that standard is agreed. This requires that the IPR holders make reasonable efforts to identify existing and pending IPR reading on the potential standard.

While Nokia generally supports the policy adopted by the Commission and believes that good faith disclosure of IPRs before the adoption of the standard have pro-competitive effects increasing transparency, Nokia has reservations what comes to disclosing early stage patent applications. For example, the disclosure of unpublished patent applications contradicts with confidentiality protection typically granted by the patent legislation for an early phase application period. Even the disclosure of published applications can be misleading as the scope of the patent claims will normally be amended during prosecution (i.e. the patent granting process) in the light of prior art, and it is only possible to assess with any degree of accuracy if claims are essential or potentially essential once the patent has been granted. Disclosure of pending applications would result in even greater uncertainty for third parties.

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The non-disclosure of patent applications would generally only become a concern if the patent holder, after the grant of a patent that has become essential, abuses the hold-up position so received by refusing to license or requesting licensing fees that are not FRAND. Nokia believes that this type of abuse of the hold-up power can be effectively prevented by requesting the participating companies to make a general FRAND commitment in the early stage of standardization. With the general commitment the patent holders would commit to be bound to FRAND in respect of all their patents and patent applications that may become essential during the standard-setting process unless they specifically decided to exclude some of their patents from the standard (or from the scope of FRAND), in which case that should be communicated and the standardization organization should ensure the patents will not become part of the standard.

The general early phase FRAND commitment would similarly be a solution to situations where the patent holders have difficulties in defining in exact terms which of their patents eventually will become essential (standard-setting being often a long process taking potentially several months or even years). General FRAND commitments would also take the focus off the importance of rigorous disclosure of each and every patents as third parties can rest assured that all patents will be subject to the FRAND commitment, whether disclosed or not.

In addition to the general FRAND declarations, the patent owners could make patent-specific declarations after the patent holders have acquired a reasonable level of certainty that the patents will become essential.

5. ABUSE OF MARKET POWER OBTAINED WITH ESSENTIAL IPR

Nokia welcomes the Commission's policy statements in the Draft Guidelines that an abuse of the market power by virtue of the IPR being included in a standard constitutes an infringement of Article 102 (paras. 284). Nokia believes that it is important to make the reference to the dominance regulation in this context as the dominant position arises from the horizontal cooperation and the objectives of such cooperation should be observed also in the assessment of what constitutes abuse. The statement is informative and it is helpful for national courts in understanding the wider context when assessing disputes about standard-essential patents and FRAND.

Generally, it is important that the Commission clearly defines what kind of conduct constitutes abuse and how FRAND should be determined. For complicated standards like telecom standards FRAND is the only workable solution to prevent patent hold up, which is why the guidance is helpful.

Also the national courts will play a central role in defining what is FRAND in individual cases. In the absence of guidance from the main European Competition Authority there is a risk that national courts in different jurisdictions take differing views possibly jeopardizing the uniform application of EC Competition law.

Clear guidance will also help the industry to predetermine and self assess what is FRAND in individual cases, which may facilitate amicable settlements and reduce litigation.

Nokia believes that the Commission could provide even more guidance in this respect than what is currently proposed in the Draft Guidelines. Further guidance would be helpful in particular in defining FRAND and whether injunctions under essential patents should be possible and under what circumstances. Some suggestions are presented below.

5.1 How to Define FRAND

The Draft Guidelines provide helpful guidance in that they state that in the assessment of FRAND the ex ante value of the relevant IPR can be observed. The Draft Guidelines further indicate that it is possible to obtain an independent expert assessment of the relevant IPR portfolio's objective quality and centrality to the standard at issue.

Generally, in determination of FRAND it is important to observe that in telecoms hundreds of companies contribute to the standardized technologies and the multifunctional devices implement multiple standards. In order for the system to remain commercially viable, the cumulative aggregate royalty burden of the standards must remain on a level that is commercially feasible.

The guidelines could usefully acknowledge that besides the individual rates also the aggregate royalty burden can be a concern and that it should generally reflect what is commercially viable for the industry (see also our comments under 6.4 below). The guidelines could also be more explicit in saying that the FRAND compensation for an individual patent should be defined considering the IPR's relative value of contribution to the standard at issue taking into account all other IPRs relevant to that standard and the aggregate reasonable royalty.

Some more detailed comments on the valuation of essential IPR are provided in section 6 below.

5.2 Injunctions under Essential Patents

Injunctions under standard-essential patents provide an extremely powerful weapon for IPR owners to pressure companies to accept non-FRAND royalty payments in fear of otherwise becoming excluded from the market. "Inflated" IPR royalties increase technical entry barriers reducing competition and follow-on innovation. Furthermore, the overcharge is eventually paid most likely by consumers.

Nokia would welcome a statement in the Draft Guidelines acknowledging that injunctions under essential patents may have negative effects on the conditions of competition if granted in cases involving abusive enforcement of essential IPR against willing licensees negotiating in good faith. This would be important guidance for the national courts and judges that consider injunctions on a regular basis but that may not be as familiar as the Commission is of the importance of standards as the enabler of the competitive market conditions in markets like telecoms.

6. EVALUATION OF THE FRAND VALUE OF THE ESSENTIAL IPR

6.1 The Use of Various Methods

Para 284. ...Various methods may be available to make this assessment. In principle, cost-based methods are not well adapted to this context because of the difficulty in assessing the costs attributable to the development of a particular patent or groups of patents.

As the Commission rightly points out various methods can and should be used in the determination of FRAND value. In fact, only very seldom just one method would produce clear evidence of the FRAND value but typically different methods indicate ranges of value and FRAND can be determined by observing all the different ranges. The more there are different methods and different data points available the more convincing and reliable results will generally be achieved.

The methods used vary case-by-case depending on what evidence or data would be available. Often the lack of specific data may reduce the number of methods that can be used.

In Nokia's opinion, cost-based methods constitute one method among others and they can be used in combination with other methods when defining FRAND (supporting the findings based on some other methods). E.g. models that assess a fair and reasonable rate of return for R&D investments use costs as key input and are thus "cost-based" but as such very useful models that provide valuable information. Cost data is typically also directly measurable when available.

Considering that the results will generally be the better the more methods that are used, it would be counterproductive to exclude cost-based methods from the scope of "acceptable" methods that can be used in combination with other methods. Nokia therefore suggests amending the statement as follows:

...Also cost-based methods are not well adapted to can be used in combination with other methods although sometimes it may be difficult to assess in exact terms this context because of the difficulty in assessing the costs attributable to the development of a particular patent or groups of patents.

6.2 Ex Ante Value of the Technology

Para 284. ...Instead, it may be possible to compare the licensing fees charged by the undertaking in question for the relevant patents in a competitive environment before the industry has been locked into the standard (ex ante) with those charged after the industry has been locked in (ex post). This assumes that the comparison can be made in a consistent and reliable manner.

Nokia believes it is very useful and informative that the Draft Guidelines contain the reference to ex ante value of IPR as one possible valuation method reflecting rightly the value in competitive environment when alternative technologies were still available for the industry.

Ex ante value of the relevant IPR can sometimes be evidenced also by means other than "fees charged". In order not to exclude other reliable evidence of the ex ante value of the relevant IPR, Nokia suggests amending the statement as follows:

...Instead, it may be possible to compare the licensing fees charged or offered in negotiations by the undertaking in question or the value otherwise existing for the relevant patents in a competitive environment before the industry has been locked into the standard (ex ante) with those charged after the industry has been locked in (ex post). This assumes that the comparison can be made in a consistent and reliable manner.

This method should not be mixed with considering what licensors may have publicly announced about the maximum fees *ex ante* as such announcements do not necessarily reflect the true market value of the technology (e.g. ex ante existing agreements might evidence that).

6.3 Expert Assessment of the Value of the IPR

Para 285. Another method of assessing the relationship of the IPR fees to the economic value of the patents could be to obtain an independent expert assessment of the relevant IPR portfolio's objective quality and centrality to the standard at issue.

This statement provides useful guidance for stakeholder that experts can be used to assess the quality and centrality of IPR to standards.

However, the courts typically assess the value of essential patents in national patent-specific litigations concerning patents filed in the respective country only. It would be useful to add to the statement a reference to individual patents or IPR to cover these patent-specific litigations in various countries.

Nokia also suggests replacing the word "patents" with "IPR" as the disputes can concern also other IPRs than patents such as utility models or copyrights. Accordingly, Nokia suggests the following amendments:

Another method of assessing the relationship of the IPR fees to the economic value of the patents IPR could be to obtain an independent expert assessment of the relevant IPR's or IPR portfolio's objective quality and centrality to the standard at issue.

6.4 Ex Ante Disclosure of Most Restrictive Licensing Terms

Para 285. It may also be possible to rely on previous unilateral ex ante disclosures of most restrictive licensing terms. This also assumes that the comparison can be made in a consistent and reliable manner. These guidelines do not seek to provide an exhaustive list of appropriate methods to assess whether the royalty fees are excessive.

While the ex ante disclosure of most restrictive licensing terms as suggested by the Commission in the Draft Guidelines may be a useful approach as an attempt to prevent abusive IPR fees in some cases, it is not well suitable to the telecoms environment, which is often characterized by complex, dynamic standards having broad technical scope, involving huge numbers of technology contributions and long evolution cycles over many years.

In 3GPP, for example, tens of thousands of technical documents are submitted each year. It is a continuously evolving process so there is no point in time when it is possible to have a meaningful auction, as there will constantly be new technology contributions coming down the pipeline over a period of many years.

Due to these complex and dynamic standard-setting processes, it is difficult for patent owners to get a good understanding of which and how many patents will be essential to the standard, who owns them prior to the standard being adopted and what the cumulative IPR environment will turn out to be.

In this environment companies have an incentive to announce inflated fees ex ante just to ensure that they are well positioned to demand as high fees as possible. Without further clarification there is the danger that some companies will argue that with the adoption of the standard means acceptance of the fees by the community and that those maximum fees have thus become the actual value of the IPR, which should not be the case. If the courts ruled in favor of this view, the announcements would have an anticompetitive effect in fact increasing the price of IPR.

Ex ante announcements of the maximum fees are unilateral statements or public offers by companies and should not be mixed up with the actual value of the technology existing ex ante (such as the fees charged ex ante). It would be helpful if the Commission made a statement further clarifying the difference.

In telecoms, ex ante disclosure of maximum fees is also likely to lead to excessive cumulative royalties, which is of even greater concern in complex technologies such as the telecom sector. Experience in the telecoms field has shown that when there are many patent owners all disclosing maximum individual royalty rates the process inherently inflates the aggregated rate which can therefore appear prohibitively

high and this may even have the undesirable effect of suggesting (wrongly) that an entire technology platform is commercially unviable.

From the perspective of complex technology standards, like telecoms, it would be significantly more useful for other stakeholders if licensors were to disclose what they regard as the maximum commercially viable aggregate rate for a given standard, rather than merely disclosing their own individual rates. This is here referred to as 'ex-ante plus' meaning disclosure of anticipated *aggregate* rates, compared with 'classical ex-ante' meaning disclosure of one's own *individual* rates.

The value of the 'ex-ante plus' model is that it puts into the public domain an array of data points about anticipated maximum aggregate royalty rates from informed actors, thus providing extremely valuable (and reliable) information for those interested in implementing the standard to better understand the likely market-entry costs attributable to the IPR. No auction is required. It is envisaged that the process would reveal a "scattergram" of data points for aggregate levels. The more licensors who participate, the more data points there will be, providing a better basis for statistical analysis, so that anyone interested can determine a spread or range of where the reasonable aggregate royalties would lie, and also revealing any data points far from the norm. Such information would be particularly useful for potential licensees, whose primary concern is the aggregated cost reservation that they would need to make for obtaining essential patent licenses.

To summarize:

- For complicated standards like telecom standards FRAND (considering the IPR's relative value of contribution to the standard at issue taking into account all other IPRs relevant to that standard and the aggregate reasonable royalty) is the only workable solution to prevent abusive patent hold up.
- It would be helpful if the Commission could explain even more clearly the difference between actual ex ante value and ex ante disclosure of maximum fees (unilateral statement, not evidence of value like an agreement) to safeguard that the system is not abused to increase the fees of IPR from what would have been the actual value of the IPR ex ante.
- To address the concerns relating to the excessive cumulative royalties in complex technology industries like telecoms, Nokia would welcome an affirmative statement that unilateral disclosure by companies, in particular licensors, of what they regard as the maximum commercially viable aggregate rate for a given standard is considered pro-competitive.

7. TERRITORIAL SCOPE OF APPLICATION

The Draft Guidelines are silent on whether the principles described are applicable to processes of standard-setting taking place outside Europe. According to EU case law, EU competition law is applicable not only in relation to competition restrictions carried out in the EU but also to those having effects within the EEA. This fact may not be known to a majority of people participating in international standardization activities. Inclusion of an explicit statement to this effect to the guidelines would have a clarifying effect.

8. THE DRAFT REGULATION ON RESEARCH AND DEVELOPMENT AGREEMENTS

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Nokia believes that fostering collaborative research and development is critical for stimulating innovation and helping industry convergence on technology solutions. For this reason, Nokia in general welcomes Commission's continued provision of block exemptions in this area. However, there are some specific changes proposed in the Draft Regulation that Nokia believes to be unnecessary and may discourage collaborative research and development activities in Europe.

Article 3, para 2. The parties [to research and development agreements] must agree that prior to starting the research and development all the parties will disclose all their existing and pending intellectual property rights in as far as they are relevant for the exploitation of the results by the other parties.

Thus, the Draft Regulation appears to suggest that R&D agreements will only be compliant if the parties make a full disclosure of all relevant background IPR. However, it appears impossible to comply with this condition since, prior to completion of the research and development, let alone prior to starting it, the results that will be forthcoming are by definition unknown. Consequently it is impossible to determine those IPRs that will be relevant for the exploitation of as yet unknown results.

Instead, Nokia suggests that the condition in Article 3, paragraph 2 should be amended to require good faith efforts to disclose of any existing IPR and first only after the patent holders have acquired a reasonable level of certainty that the patents will become relevant.

The considerations presented in Section 4 what comes to disclosing confidential patent applications apply equally in this context. Companies should not be obliged to disclose confidential patent applications that enjoy confidentiality protection by law.

Article 3, para 3. The research and development agreement must stipulate that all the parties must have equal access to the results of the joint research and development for the purposes of further research or exploitation. However, research institutes, academic bodies, or undertakings which supply research and development as a commercial service without normally being active in the exploitation of results may agree to confine their use of the results for the purposes of further research.

The Draft Regulation requires "equal access" by all participants to the collaboration to exploit the results of the collaboration. Equal access in this context is a somewhat far-reaching requirement as the contributions of the individual participants may not be of equal value – some contributing more or contributing parts that are of greater value. To ensure that the companies can get compensation that is proportionate to the relative value of their respective contributions to the results Nokia suggest amending the word "equal" to "non-discriminatory".

Article 3, para 4. Without prejudice to paragraph 3, where the research and development agreement provides only for joint research and development, the research and development agreement must stipulate that each party must be granted access to any pre-existing know-how of the other parties, if this know-how is indispensable for the purposes of its exploitation of the results.

The Draft Regulation requires that the participants to the collaboration must be granted access to any pre-existing know-how of the other parties, if this know-how is indispensable for the purposes of its exploitation of the results. To ensure that the requirement applies only to the extent the know-how is indispensable for the purposes of exploitation of the results and does not provide for broader access Nokia suggests amending the text with the addition "to the extent" as apparent below.

To summarize, Nokia suggests the following amendments:

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2. The parties must agree ~~that~~ prior to starting the research and development that all the parties will use their best efforts to disclose all their existing ~~and pending~~ intellectual property rights in as far as they are relevant for the exploitation of the results by the other parties and as soon as they have acquired a reasonable level of certainty that the intellectual property rights will become relevant for the exploitation of the results.

3. The research and development agreement must stipulate that all the parties must have ~~equal~~ non-discriminatory access to the results of the joint research and development for the *purposes of further research or exploitation*. However, *research institutes, academic bodies, or undertakings which supply research and development as a commercial service without normally being active in the exploitation of results* may agree to confine their use of the results for the purposes of further research.

4. Without prejudice to paragraph 3, where the research and development agreement provides only for joint research and development, the research and development agreement must stipulate that each party must be granted access to any pre-existing know-how of the other parties, if and to the extent this know-how is indispensable for the purposes of its exploitation of the results.

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In Espoo, Finland, on 24 June 2010

Respectfully,

NOKIA CORPORATION