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Erlangen, 12 February 2020

### Uploaded via the European Commission's Roadmap portal

Dear Mesdames and Messieurs,

#### **Comments on the Roadmap initiative: "Evaluation of the two Block Exemption Regulations for horizontal co-operation agreements"**

We thank the European Commission for the opportunity to engage in the ongoing consultation and dialogue regarding the review of the two Block Exemption Regulations for horizontal co-operation agreements and the related Guidelines.

Fraunhofer is Germany's and Europe's largest industrial research organisation, collaborating across a broad range of sectors and entity types for the benefit of government, industry and society. It is active in the fields of communications and ICT, health and environment, mobility and transport, security and protection, and production and services.<sup>1</sup>

As a developer and holder of all types of intellectual property, Fraunhofer actively participates in several standard-developing organisations (SDOs), including ETSI, DVB, ITU-T, ISO-IEC, with the goal to deliver world class technical standards to the benefit of end-consumers. Fraunhofer has also participated in many licensing programs developed to implement global technology solutions to ultimately serve societal benefit and advancement. Both as an applied research partner and in its active pursuit of achieving the strategic technology-based goals of government, Fraunhofer is attentive to the legal and policy framework conditions for investment into research and return on this investment.

While Fraunhofer does not engage in production and commercialisation of goods and does not rely on the competition law exemptions provided under Regulation No 1218/2010 (Specialisation BER), Fraunhofer has many research and development (R&D) agreements in place and participates in standard setting organisations, thus benefitting from the antitrust exemption granted by Regulation No 1217/2010 (R&D BER) and the Guidelines on the applicability of Article 101 of the Treaty on the Functioning of the European Union (TFEU) to Horizontal Co-operation Agreements (HGL).

In general, Fraunhofer's experience with the R&D BER and the HGL is highly positive. These documents provide entities active in R&D and standardisation with good guidance on how to comply with EU competition law. Moreover, the R&D BER and the HGL acknowledge the economic efficiencies arising from R&D and standardisation agreements and preserve incentives to innovate, thus encouraging investment in innovation and enhancing dynamic competition for the market, to the ultimate benefit of consumers. It is humbly recommended that such high standard of clarity be preserved in any future version of these documents.

A review of the R&D BER and the HGL appears timely to ensure that healthy competition for the market, and in the market, still leads to new technologies, products and processes in the future. However, the Commission is respectfully invited to ensure that the evaluation of these documents preserves the current framework which assisted European standardisation to develop the best solutions. Competition policy should support this objective.

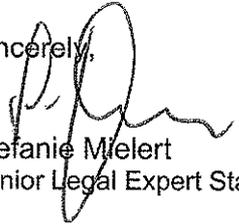
It is considered that retaining consistency between EU competition policy and wider EU policy and practice should be a key objective for the European Commission. Ambitious goals such as achieving a Digital Single Market and the adoption of 5G can only be achieved by encouraging investment in R&D and standardisation and safeguarding intellectual property rights. Ultimately these elements are important for the sustainable, dynamic and international competitiveness of Europe, along with improvement in quality of life.

Significant changes to this framework may severely harm incentives for European-based companies to invest in R&D and innovation, thus resulting in a loss of international competitiveness for the European economy. In this regard, there appears to be attempts by some groups to have the scope of the HGL extended to licensing negotiations involving standard essential patents (see by way of example ACT – The App Association, contribution submitted during the first phase of this consultation, available at [https://ec.europa.eu/info/law/better-regulation/initiatives/ares-2019-4715393/feedback/F473574\\_en?p\\_id=5763121](https://ec.europa.eu/info/law/better-regulation/initiatives/ares-2019-4715393/feedback/F473574_en?p_id=5763121)). Standard essential patents are patents, and there is no reason to distinguish these as a separate class of IP. IP licensing agreements are already addressed in a very clear manner under the Technology Transfer Block Exemption Regulation No 316/2014 (TTBER) and the Guidelines on the application of Article 101 TFEU to Technology Transfer Agreements. Including principles governing IP licensing negotiations in the HGL would give rise to confusion and possible conflicts, thus frustrating the interpreting function of these documents. The decision of the Court of Justice of the European Union in *Huawei v. ZTE* (16 July 2015, C-170/13) is considered to already confirm applicable principles for licensing negotiations.

Any introduction of commercial terms within standard development organisations gives rise to a real risk of a consequential distortion of trade, whereby dominating interests create unfair disadvantage for asset holders – thus undermining Europe's economic efficiency based on standardised technology and perhaps encouraging a system based on proprietary technology. Naturally any proposed change to the HGL would need to clearly identify an issue supported by verified empirical data, clearly suggest a proposal to address this, and undertake an impact assessment.

We hope that our response to the online questionnaire and our comments on the HGL in the **Annex 1** below are of assistance to your consultation process. We are happy to respond to any questions you may have regarding the comments, and remain in dialogue with the Commission on these important issues.

Sincerely,



Stefanie Mielert

Senior Legal Expert Standards, IP and Innovation

**Annex 1 – Comments**

Paragraph	HGL text	Comments
<b>Paragraph 111 ff.</b>	<p><i>R&amp;D agreements vary in form and scope. They range from outsourcing certain R&amp;D activities to the joint improvement of existing technologies and co-operation concerning the research, development and marketing of completely new products. They may take the form of a co-operation agreement or of a jointly controlled company. This chapter applies to all forms of R&amp;D agreements, including related agreements concerning the production or commercialisation of the R&amp;D results.</i></p>	<p>Fraunhofer has many R&amp;D agreements in place and participates in standard setting organisations, thus benefitting from the antitrust exemption granted by Regulation No 1217/2010 (R&amp;D BER) and the Guidelines on the applicability of Article 101 of the Treaty to horizontal co-operation agreements (HGL). In general, our experience with the R&amp;D BER and the HGL is positive, due to the clarity of the guidance provided by these documents.</p> <p>Innovation and R&amp;D are considered to be essential at all levels along the market chain and not only at the downstream level. It is often erroneously thought that manufacturers of consumer goods, particularly in the ICT and telecommunications industries, contribute the most to technology advancement. This ill-conceived perception is generated by the circumstance that products such as smartphones, personal computers and tablets are associated by consumers with the innovation and modernity.</p> <p>However, end-user devices would not be able to perform most of their functions without the underpinning technology developed by market players active on the upstream side of the market. Universities, research institutes and companies active in R&amp;D have significantly contributed over the years to innovation through creation and standardisation of breakthrough technologies. By way of example, 5G is essential to the operation of the so-called “internet of things” (IoT), a continually growing network of inter-connected electronic devices.</p> <p>Just to give a sense of the economic impact made by investments in R&amp;D, “the global internet of things (IoT) market is expected to grow to 212 billion US dollars in size by the end of 2019. The technology reached 100 billion dollars in market revenue for the first time in 2017, and forecasts suggest that this figure will grow to around 1.6 trillion by 2025” (See Statista, “Size of the Internet of Things (IoT) market worldwide from 2017 to 2025”, available at <a href="https://www.statista.com/statistics/976313/global-iot-market-size/">https://www.statista.com/statistics/976313/global-iot-market-size/</a>).</p>

		<div data-bbox="226 241 925 1176" style="border: 1px solid black; padding: 10px;"> <p><b>The Innovation Cycle</b></p> <p>Reinvest in independent future R&amp;D/R&amp;I</p> <p>Idea/Project/Contract</p> <p>(Joint) Research</p> <p>Intellectual Property (Rights)</p> <p>Innovation</p> <p>Commercialisation</p> <p>Revenue</p> <p>Needs a stable and robust (legal) framework to be successfully implemented</p> <p>Fraunhofer</p> </div>
<p><b>Paragraphs 263 and 308</b></p>	<p><i>Paragraph 263: Standardisation agreements usually produce significant positive economic effects, for example by promoting economic interpenetration on the internal market and encouraging the development of new and improved products or markets and improved supply conditions. Standards thus normally</i></p>	<p>In order to keep the innovation cycle spinning, we respectfully recommend that the extraordinary level of clarity on the conditions for an antitrust exemption for R&amp;D agreements be preserved in any future version of the R&amp;D BER and the HGL.</p> <p>We commend the Commission for recognising standards as solutions that are mutually beneficial for all actors in the market. Consumers and producers alike benefit from efficiently obtained standard solutions that are interoperable and have backward compatibility.</p> <p>Manufacturing consumer goods like smartphones, TV sets and tablets or implementing even more innovative solutions relating to the diffusion of the IoT</p>

increase competition and lower output and sales costs, benefiting economies as a whole. Standards may maintain and enhance quality, provide information and ensure interoperability and compatibility (thus increasing value for consumers).

Paragraph 308: Standardisation agreements frequently give rise to significant efficiency gains. For example, Union wide standards may facilitate market integration and allow companies to market their goods and services in all Member States, leading to increased consumer choice and decreasing prices. Standards which establish technical interoperability and compatibility often encourage competition on the merits between technologies from different companies and help prevent lock-in to one particular supplier. Furthermore, standards may reduce transaction costs for sellers and buyers. Standards on, for instance, quality, safety and environmental aspects of a product may also facilitate consumer choice and can lead to increased product quality. Standards also play an important role for innovation. They can reduce the time it takes to bring a new technology to the market and facilitate innovation by allowing companies to build on top of agreed solutions.

imply the adoption of a number of patented technologies owned by different parties. The absence of technical standards would make it extremely time-consuming and expensive for end-user device manufacturers to identify the available technical solutions and to make their products interoperable with the others available on the market.

According to the European Commission, *“without interoperability, enabled by standards, 40 % of the potential benefits of IoT systems would not be reaped. Without formal standardisation and SEPs, there would be, for example, no connected vehicles. Tele-diagnosis or remote operations with distant hospitals or to exchange patient information would not be possible either”*. (See European Commission, *“Communication on Setting out the EU approach to Standard Essential Patents”*, available at <https://ec.europa.eu/docsroom/documents/26583>).

The language employed in the HCG has triggered investments in R&D and standardisation over the years and enhanced innovation, to the ultimate benefit of end-consumers. We respectfully recommend that this high-level of clarity be preserved in any future version of these documents.

**Paragraph  
267**

*In the context of standards involving intellectual property rights ('IPR'), three main groups of companies with different interests in standard-setting can be distinguished in the abstract. First, there are upstream-only companies that solely develop and market technologies. Their only source of income is licensing revenue and their incentive is to maximise their royalties. Secondly, there are downstream-only companies that solely manufacture products or offer services based on technologies developed by others and do not hold relevant IPR. Royalties represent a cost for them, and not a source of revenue, and their incentive is to reduce or avoid royalties. Finally, there are vertically integrated companies that both develop technology and sell products. They have mixed incentives. On the one hand, they can draw licensing revenue from their IPR. On the other hand, they may have to pay royalties to other companies holding IPR essential to the standard. They might therefore cross-license their own essential IPR in exchange for essential IPR held by other companies.*

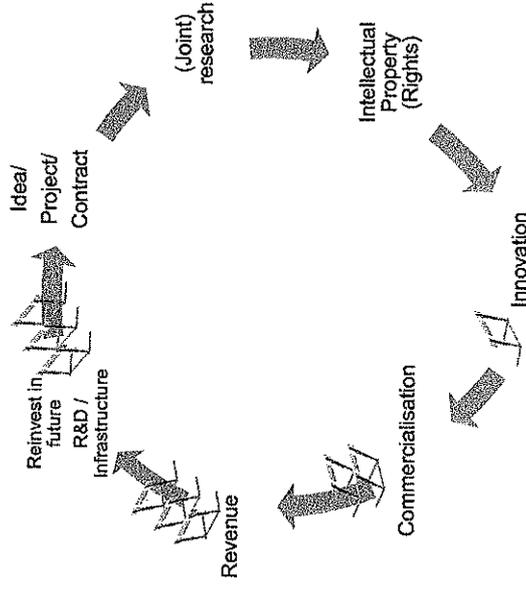
It is considered that the description of incentives driving "upstream-only" companies and "downstream only" companies is inaccurate and does not reflect ordinary commercial practises. Indeed, upstream-only companies' incentive to maximise their revenue is significantly limited by the regulatory framework applicable to patent owners. Regarding standard essential patents, the basic principle of fair, reasonable and non-discriminatory (FRAND) licensing is adopted in SDOs without any preference for a licensing model. Breach of any FRAND commitment may result in liability arising under either contract or competition law, as determined by national and European case law over the years.

On the contrary, downstream-only companies' incentive to reduce or avoid payment for IP use has been further encouraged by short-sighted policies adopted in some jurisdictions which have made injunctive relief incredibly difficult to obtain in case of patent infringement.

In order to preserve incentives to invest in R&D and further trigger dynamic competition for the market, we respectfully invite the Commission to acknowledge that the real danger for innovation nowadays appears to be the scale reached by patent infringement, and the cost-benefit analysis undertaken by infringers regarding savings through infringement versus litigation costs.

'Efficient infringement' cannot be the new norm – a strategy employed by certain companies based on a short- to medium-term cost-benefit analysis. Governments around the world have recognised this, with less tolerance for companies that do not respect intellectual property rights (see US Department of Justice, US Patent and Trademark Office, National Institute of Standards and Technology, "Policy Statement on Remedies for Standards Essential Patents Subject to Voluntary F/Rand Commitments", 19 December 2019, available at <https://www.justice.gov/opa/pr/departement-justice-united-states-patent-and-trademark-office-and-national-institute-standards>; see Directive 2004/48/EC of the European Parliament and of the Council "on the enforcement of intellectual property rights", 29 April 2004, available at [https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:32004L0048R\(01\)&from=EN](https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:32004L0048R(01)&from=EN)).

### Undesirable Settings for an Innovation Cycle



Any adoption of “efficient patent infringement” can only achieve a short-term individual company goal and could significantly negatively impact the long-term objectives of the European economy and innovation ecosystem, by placing hurdles in front of protection and commercialisation of IP.

The recent EPO-EUIPO study on inventive industries demonstrates empirically the importance of highly innovative firms to the European economy:

- IPR-intensive industries generated 29.2% of all jobs in the EU during the period 2014-2016.<sup>1</sup>
- Taking indirect jobs into account, the total number of IPR-dependent jobs rises to 83.8 million (38.9%).<sup>2</sup>

<sup>1</sup> EPO-EUIPO Study on the IPR-intensive industries and economic performance in the European Union; Industry-Level Analysis Report, September 2019, Third edition, p. 7. Available at: [http://documents.epo.org/projects/babylon/eponet.nsf/0/9208BDA62793D113C125847A00500CAA/\\$File/IPR-intensive industries and economic performance in the EU 2019\\_en.pdf](http://documents.epo.org/projects/babylon/eponet.nsf/0/9208BDA62793D113C125847A00500CAA/$File/IPR-intensive%20industries%20and%20economic%20performance%20in%20the%20EU%202019_en.pdf)

<sup>2</sup> Ibid.

		<ul style="list-style-type: none"> <li>• Over the same period, IPR-intensive industries generated almost 45% of total economic activity (GDP) in the EU, worth €6.6 trillion.<sup>3</sup></li> <li>• They also accounted for most of the EU's trade with the rest of the world and generated a trade surplus, thus helping to keep the EU's external trade broadly balanced.<sup>4</sup></li> <li>• IPR-intensive industries pay significantly higher wages than other industries, with a wage premium of 47% over other industries.<sup>5</sup></li> </ul> <p>Any slowdown in the area of the innovation economy will have an effect on employment, GDP and trade balance in Europe. In addition, this will diminish the return on investment in R&amp;D for the European governments – and their taxpaying citizens.</p> <p>The Commission is respectfully requested to focus its attention on risks arising from the practise of some companies of a short-term strategy of 'efficient patent infringement', which leads to larger, long-term problems related to overburdened court systems, and which reduce the ability of compliance and competitive European companies to recoup a return on investment on their intellectual property assets for sustainable innovation.</p> <p>In order to trigger dynamic competition and to foster innovation, innovators must not be unduly restricted in the exploitation of intellectual property rights and should be free to seek appropriate remuneration for successful projects, so that the innovation cycle can be further maintained. This is reflected in the Guidelines to Article 101 TFEU.</p> <p>It is considered that this same philosophy should be reflected in the HGL, particularly when describing the incentives driving companies participating in standard-development.</p>
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<sup>3</sup> Ibid.

<sup>4</sup> Ibid.

<sup>5</sup> Ibid.

<p><b>Paragraphs 268 and 288</b></p>	<p><i>Paragraph 268: Third, standardisation may lead to anti-competitive results by preventing certain companies from obtaining effective access to the results of the standard-setting process (that is to say, the specification and/or the essential IPR for implementing the standard). If a company is either completely prevented from obtaining access to the result of the standard, or is only granted access on prohibitive or discriminatory terms, there is a risk of an anti-competitive effect. A system where potentially relevant IPR is disclosed upfront may increase the likelihood of effective access being granted to the standard since it allows the participants to identify which technologies are covered by IPR and which are not. This enables the participants to both factor in the potential effect on the final price of the result of the standard (for example choosing a technology without IPR is likely to have a positive effect on the final price) and to verify with the IPR holder whether they would be willing to license if their technology is included in the standard.</i></p> <p><i>Paragraph 288: Compliance with Article 101 by the standard-setting organisation does not require the standard- setting organisation to verify whether licensing terms of participants fulfil the FRAND commitment. Participants will have to assess for themselves whether the licensing terms and in particular the fees they charge fulfil the FRAND commitment. Therefore, when deciding whether to commit to FRAND for a particular IPR, participants will</i></p>	<p>As to the scope and the timing of upfront disclosures of standard essential patents in the ICT space, we refer to our comment on paragraph 327 below.</p> <p>In general, it is believed that assessing the effect of incorporating certain technologies in the standard, on production costs and the price of standard-compliant product, is important. However, it should be made clear that SDOs should not engage in assessing whether licensing terms of participants comply with the FRAND principle. This is affirmed by the European Commission in paragraph 288 of the HGL. The notion of FRAND differs from case to case, covers the licensing terms and the entire negotiation process, with the FRAND evaluation being left to the licensing parties in the relevant market context.</p> <p>SDOs cannot play a role in defining the meaning of FRAND, as this might give rise to collusive conduct within SDOs and result in harming competition for the market. Successful deployment of the Digital Single Market requires that SDOs focus on the development of qualitative standards “that are based on solutions which best meet the technical objectives of the European telecommunications sector” (see ETSI Directives, Rules of Procedure, Annex 6, Clause 3.1, page 39. Available at <a href="https://portal.etsi.org/directives/40_directives_apr_2019.pdf">https://portal.etsi.org/directives/40_directives_apr_2019.pdf</a>).</p> <p>The Commission recently confirmed that “there is no one-size-fit-all solution to what FRAND is: what can be considered fair and reasonable differs from sector to sector and over time” and that “parties to a SEP licensing agreement, negotiating in good faith, are in the best position to determine the FRAND terms most appropriate to their specific situation” (See European Commission, “Communication on Setting out the EU approach to Standard Essential Patents”, pages 7 and 8, available at <a href="https://ec.europa.eu/docsroom/documents/26583">https://ec.europa.eu/docsroom/documents/26583</a>).</p> <p>The Commission came to this conclusion based on two landmark rulings, namely <i>Huawei v ZTE</i> (CJEU, 16 July 2015, C-170/13, available at <a href="http://curia.europa.eu/juris/document/document.jsf?text=&amp;docid=165911&amp;pageIndex=0&amp;doclang=EN&amp;mode=lst&amp;dir=&amp;occ=first&amp;part=1&amp;cid=4095993">http://curia.europa.eu/juris/document/document.jsf?text=&amp;docid=165911&amp;pageIndex=0&amp;doclang=EN&amp;mode=lst&amp;dir=&amp;occ=first&amp;part=1&amp;cid=4095993</a>) and <i>Unwired Planet v. Huawei</i> (High Court of England and Wales, 30 November 2017, EWHC 711 (Pat), available at <a href="https://www.judiciary.gov.uk/wp-">https://www.judiciary.gov.uk/wp-</a></p>
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	<p><i>need to anticipate the implications of the FRAND commitment, notably on their ability to freely set the level of their fees.</i></p>	<p><a href="https://www.bailii.org/ew/cases/EWCA/Civ/2018/2344.html">content/uploads/2017/04/unwired-planet-v-huawei-20170405.pdf</a>, later upheld by the Court of Appeal, [2018] EWCA Civ 2344, available at <a href="https://www.bailii.org/ew/cases/EWCA/Civ/2018/2344.html">https://www.bailii.org/ew/cases/EWCA/Civ/2018/2344.html</a>).</p> <p>The anticompetitive risks arising from agreements aimed at limiting or controlling technical developments have recently been further highlighted by the European Commission, which is investigating whether BMW, Daimler and VW (Volkswagen, Audi, Porsche) colluded, in breach of EU antitrust rules, to limit the development and roll-out of certain emissions control systems for cars sold in the European Economic Area. When the statement of objections was sent to the parties, commissioner Vestager said: “Companies can cooperate in many ways to improve the quality of their products. However, EU competition rules do not allow them to collude on exactly the opposite: not to improve their products, not to compete on quality”. (see <a href="https://ec.europa.eu/commission/presscorner/detail/en/IP_19_2008">https://ec.europa.eu/commission/presscorner/detail/en/IP_19_2008</a>).</p> <p>Applied to the world of standard development organisations, it might mean that if companies participating in standardisation activities decide to exclude a certain technology from the technical standard to limit costs and in absence of technical reasons, an antitrust risk might arise.</p> <p>Based on the above, it is respectfully suggested that the Commission clarifies the limitations placed on SDOs and SDO participants if engaging in cost assessment when determining the technology to go into a standard. Reference could be made to the abovementioned “Communication on Setting out the EU approach to Standard Essential Patents”.</p>
<p><b>Paragraph 327</b></p>	<p><i>Standardisation agreement without IPR disclosure: Example 3 Situation: A private standard-setting organisation active in standardisation in the ICT (information and communication technology) sector has an IPR policy which neither requires nor encourages disclosures of IPR which could be essential for the future</i></p>	<p>We commend the European Commission for noting at paragraph 327 of the HGL that in the ICT space, where all technologies potentially relevant for the future standard are covered by many IP, an upfront disclosure of standard essential patents would not enable the participants to choose a solution with no or little IP.</p>

standard. The standard-setting organisation took the conscious decision not to include such an obligation in particular considering that in general all technologies potentially relevant for the future standard are covered by many IPR. Therefore the standard-setting organisation considered that an IPR disclosure obligation would, on the one hand, not lead to the benefit of enabling the participants to choose a solution with no or little IPR and, on the other, would lead to additional costs in analysing whether the IPR would be potentially essential for the future standard. However, the IPR policy of the standard-setting organisation requires all participants to make a commitment to license any IPR that might read on the future standard on FRAND terms. The IPR policy allows for opt-outs if there is specific IPR that an IPR holder wishes to put outside the blanket licensing commitment. In this particular industry there are several competing private standard-setting organisations. Participation in the standard-setting organisation is open to anyone active in the industry.

Analysis: In many cases an IPR disclosure obligation would be pro-competitive by increasing competition between technologies ex ante. In general, such an obligation allows the members of a standard-setting organisation to factor in the amount of IPR reading on a particular technology when deciding between competing technologies (or even to, if possible, choose a technology which is not covered by IPR). The amount of IPR reading on a technology will often have a direct impact on

It is believed that, in general, the purpose of upfront disclosure of standard-essential patents is to better ensure that a standard developed in an SDO can be implemented.

As to the timing of disclosure, it is believed that this should be fact-dependant, as noted by the Commission at paragraph 327 of the HGL. For example, it is not always possible to disclose potentially essential patents before the adoption of a standard, as essentiality needs to be checked against a defined and approved standard. In practise, SDOs generally resort to expressions like 'as soon as feasible' or 'in a timely fashion' to determine the timing for disclosure of essential patents. The reason for that, is that disclosure is done after the standard has been established and it is clear which technology is included in it. Only at that point in time is a sound patent mapping possible. It can also be true that patents are only granted after the time that a standard is set – as there is a dynamic and sometimes incomplete overlay of standardisation, R&D and IP creation in this context.

This is particularly true in the ICT space, where an early disclosure obligation might lead to additional costs for the participants and to a slower adoption of the standard. The claim made by some companies that late filing of a patent would contribute to over declaration appears to be incorrect. On the contrary, over declaration is triggered by burdening patent holders with the obligation to notify patents as standard essential at an early stage, as that will lead to more patents being filed than is justified (in retrospect) for reasons of certainty (see Court of Appeal of The Hague, *Koninklijke Philips N.V. vs. Asustek Computers Inc. and others*, 7 May 2019).

In light of the above, we respectfully suggest that the principle expressed at paragraph 327 of the HGL in relation to the ICT industry be expressed in terms of high-level principle in the HGL.

	<p><i>the cost of access to the standard. However, in this particular context, all available technologies seem to be covered by IPR, and even many IPR. Therefore, any IPR disclosure would not have the positive effect of enabling the members to factor in the amount of IPR when choosing technology since regardless of what technology is chosen, it can be presumed that there is IPR reading on that technology. IPR disclosure would be unlikely to contribute to guaranteeing effective access to the standard which in this scenario is sufficiently guaranteed by the blanket commitment to license any IPR that might read on the future standard on FRAND terms. On the contrary, an IPR disclosure obligation might in this context lead to additional costs for the participants. The absence of IPR disclosure might also, in those circumstances, lead to a quicker adoption of the standard which might be important if there are several competing standard-setting organisations. It follows that the agreement is unlikely to give rise to any negative effects on competition within the meaning of Article 101(1).</i></p>	
<p><b>Paragraph 269</b></p>	<p><i>Intellectual property laws and competition laws share the same objectives of promoting innovation and enhancing consumer welfare. IPR promote dynamic competition by encouraging undertakings to invest in developing new or improved products and processes. IPR are therefore in general pro-competitive. However, by virtue of its IPR, a participant holding IPR essential for</i></p>	<p>Referring to an unclear expression - "patent hold-up" - without considering at the same time the stronger incentives that implementers have to "hold-out" may disincentivise investments in R&amp;D and severely harm innovation.</p> <p>As noted in a policy statement by US DOJ Assistant Attorney General Makan Delrahim, "since hold-up theories gained traction in the early 2000s, it is striking that they still remain an empirical enigma in the academic literature. Antitrust law demands evidence-based enforcement, without which there is a real threat</p>

	<p><i>implementing the standard, could, in the specific context of standard-setting, also acquire control over the use of a standard. When the standard constitutes a barrier to entry, the company could thereby control the product or service market to which the standard relates. <u>This in turn could allow companies to behave in anti-competitive ways, for example by 'holding-up' users after the adoption of the standard either by refusing to license the necessary IPR or by extracting excess rents by way of excessive royalty fees thereby preventing effective access to the standard.</u> However, even if the establishment of a standard can create or increase the market power of IPR holders possessing IPR essential to the standard, there is no presumption that holding or exercising IPR essential to a standard equates to the possession or exercise of market power. The question of market power can only be assessed on a case by case basis. (Emphasis added)</i></p>	<p>of undermining incentives to innovate” (see Makan Delrahim, Keynote Address at University of Pennsylvania Law School, 16 March 2018, available at <a href="https://www.justice.gov/opa/speech/assistant-attorney-general-makan-delrahim-delivers-keynote-address-university">https://www.justice.gov/opa/speech/assistant-attorney-general-makan-delrahim-delivers-keynote-address-university</a>).</p> <p>Fraunhofer notes that the European Commission has accepted the principle that patent hold-out poses as many risks as patent hold-up does: “With respect to the security to be provided by the SEP user as protection against an injunction, the amount should be fixed at a level that discourages patent hold-out strategies”. (See European Commission, “Communication on Setting out the EU approach to Standard Essential Patents”, page 10, available at <a href="https://ec.europa.eu/docsroom/documents/26583">https://ec.europa.eu/docsroom/documents/26583</a>).</p> <p>As a suggestion, the Commission could acknowledge the existence of patent hold-out in the HGL, and note that patent hold-out raises more severe risks to innovation than patent hold-up. While companies active in R&amp;D have to invest significant amounts of money in the creation of new technology without any guarantee on the outcome of the investment, implementers can free-ride the efforts made by the innovative companies and postpone payment of royalties for many years, sometimes even for ever if patents are owned by small and medium enterprises which cannot afford patent litigation.</p> <p>Entities engaging in patent hold-out enjoy an unfair competitive advantage in the market by using patents without a license, to the disadvantage of those companies which are duly licensed and pay royalties to the patent holder. This circumstance poses a serious threat to the preservation of a level playing field in the European Economic Area.</p> <p>Fraunhofer notes that there is no assumption at law that patent hold up or patent hold out exist as a ‘state of play’, and that any assertion of either needs to be made on a case by case basis, and based on cogent evidence.</p>
<p><b>Paragraphs 283, 289</b></p>	<p><i>Paragraph 283: Furthermore, the standard-setting organisation's rules would need to ensure effective access to the standard on</i></p>	<p>For sake of consistency between EU competition policy and wider EU policy and practice, it is respectfully suggested that the general principles relating to FRAND licensing in the HGL be updated to reflect the following principles</p>

**fair, reasonable and non discriminatory terms**

Paragraph 289: *In case of a dispute, the assessment of whether fees charged for access to IPR in the standard-setting context are unfair or unreasonable should be based on whether the fees bear a reasonable relationship to the economic value of the IPR. In general, there are various methods 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. Instead, it may be possible to compare the licensing fees charged by the company 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*

determined by the Commission in its 29 November 2017 Communication (see European Commission, "Communication on Setting out the EU approach to Standard Essential Patents", page 8, available at <https://ec.europa.eu/docsroom/documents/26583>):

*In view of current developments, the Commission considers that SEP licencing should be based on the basis of the following principles:*

- *There is no one-size-fit-all solution on what FRAND is: what can be considered fair and reasonable can differ from sector to sector and over time. Efficiency considerations, reasonable licence fee expectations on both sides, the facilitation of the uptake by implementers to promote wide diffusion of the standard should be taken into account.*
- *Determining a FRAND value should require taking into account the present value added of the patented technology. That value should be irrespective of the market success of the product which is unrelated to the value of the patented technology.*
- *In defining a FRAND value, parties need to take account of a reasonable aggregate rate for the standard.*
- *The non-discrimination element of FRAND indicates that rightsholders cannot discriminate between implementers that are 'similarly situated'.*
- *For products with a global circulation, SEP licences granted on a worldwide basis may contribute to a more efficient approach and therefore can be compatible with FRAND.*

*The Commission calls on SDOs and SEP holders to develop effective solutions to facilitate the licensing of a large number of implementers in the IoT environment (especially SMEs), via patent pools or other licensing platforms, while offering sufficient transparency and predictability. The Commission will monitor licencing practices, in particular in the IoT sector. It will also set up an expert group with the view to deepening expertise on industry licencing practices, sound IP valuation and FRAND determination.*

**Paragraph  
284**

*In the case of a standard involving IPR, a clear and balanced IPR policy, adapted to the particular industry and the needs of the standard-setting organisation in question, increases the likelihood that the implementers of the standard will be granted effective access to the standards elaborated by that standard-setting organisation.*

Fraunhofer agrees that a clear and balanced IP policy, adapted to the particular industry (sector commercial norms) and to the needs of the relevant SDO is of essence. This should also serve the purpose of ensuring access to the standard by implementers, and preserving patent holders' incentives to participate in standardisation.

Having noted the importance of intellectual property as part of a healthily competitive and sustainable innovation system for societal benefit, it is observed that attempts have been made to broadly devalue intellectual property. An extreme example of this is reflected in the 2015 revision to the Patent Policy of the Institute of Electrical and Electronics Engineers (IEEE). As a result of changes which appear aimed at devaluing intellectual property, this policy seeks to restrict licensing practices in a manner which do not reflect international commercial norms, and introduce barriers for protecting IP in the case of infringement. This in turn appears to have led to uncertainty regarding participation in, and the implementation of, IEEE standards.

Public data available on the IEEE's database show that as of today, of 51 letters of assurance accepted since 2016 for the Wi-Fi standard, 32 of them – 62.7 % – have been negative. Prior to the IEEE's patent policy being amended in March 2015, just one negative LOA had been filed since 2000. Negative LOAs in relation to WiFi standards have been filed in recent years by several companies, including Nokia, Huawei, Ericsson, InterDigital, Panasonic, Orange and Philips (see IEEE SA Records of IEEE Standards-Related Patent Letters of Assurance, IEEE 802.11™ and amendments, available at <https://standards.ieee.org/about/sasb/patcom/patents.html>; see also Kevin Madigan, Adam Mossoff, "Study finds IEEE's 2015 patent policy sowing uncertainty and slowing innovation", available on <https://www.4jpcouncil.com/news/study-finds-ieeees-2015-patent-policy-sowing-uncertainty-and-slowing-innovation>; Kirti Gupta, Georgios Effraimidis, "IEEE Patent Policy Revisions: An Empirical Examination of Impact", available at [http://www.law.northwestern.edu/research-faculty/cibe/events/roundtable/documents/effraimidis\\_gupta.pdf](http://www.law.northwestern.edu/research-faculty/cibe/events/roundtable/documents/effraimidis_gupta.pdf)).

		<p>In order to prevent any repeat of these events in other SDOs, it is suggested that cogent evidence of conduct such as willful infringement, or collusive agreements of a commercial nature within SDOs, be dealt with under the scope of the HGL. This is because such conduct creates overall inefficiency in the system (market, as well as the court and innovation systems), reducing incentives for investment in areas crucial for societal advancement.</p>
<p><b>Paragraph 290</b></p>	<p><i>Another method could be to obtain an independent expert assessment of the objective centrality and essentiality to the standard at issue of the relevant IPR portfolio. In an appropriate case, it may also be possible to refer to ex ante disclosures of licensing terms in the context of a specific standard-setting process. This also assumes that the comparison can be made in a consistent and reliable manner. The royalty rates charged for the same IPR in other comparable standards may also provide an indication for FRAND royalty rates. These guidelines do not seek to provide an exhaustive list of appropriate methods to assess whether the royalty fees are excessive.</i></p>	<p>Obtaining an independent expert assessment of essentiality to the standard at issue of the relevant IPR portfolio is a common practise for patent holders participating in patent pools.</p> <p>A pilot project on essentiality check has been carried out by the Joint Research Center of the European Commission for about 16 months and we look forward to reviewing the outcome. In this regard, it is respectfully observed that the impact of early essentiality checks on FRAND rates will be uncertain due to the dynamics of portfolio licensing. There are many other factors considered by patent holders when setting the licence fees (i.e.: R&amp;D investment, the contributions of a firm to the standard relative to the contributions of other firms, portfolio strength and coverage, timing considerations - early licensees will get a discount to get the licensing programme on track, the expected future contributions to standards).</p> <p>Introducing mandatory essentiality checks prior to the adoption of the standard will be expensive (about 10-20K euro per patent), time-consuming, and would harm a foundational principle of technology standardisation, namely its openness and efficiency. Indeed, such measures would result in companies with limited resources - such as SMEs and startups - being excluded from the standardization process (barrier to entry as well as creating barriers to participate in standards-based business).</p> <p>Essentiality checks should be performed, as it happens today, by patent holders or patent pools after adoption of the technical standard. The outcome of the essentiality checks should be treated as confidential information and accessed upon execution of a non-disclosure agreement. This is recognized in jurisdictions in Europe and around the world.</p>

<p><b>Paragraph 299</b></p>	<p><i>Finally, standard-setting agreements providing for ex ante disclosures of most restrictive licensing terms, will not, in principle, restrict competition within the meaning of Article 101(1). In that regard, it is important that parties involved in the selection of a standard be fully informed not only as to the available technical options and the associated IPR, but also as to the likely cost of that IPR. Therefore, should a standard-setting organisation's IPR policy choose to provide for IPR holders to individually disclose their most restrictive licensing terms, including the maximum royalty rates they would charge, prior to the adoption of the standard, this will normally not lead to a restriction of competition within the meaning of Article 101(1). Such unilateral ex ante disclosures of most restrictive licensing terms would be one way to enable the standard-setting organisation to take an informed decision based on the disadvantages and advantages of different alternative technologies, not only from a technical perspective but also from a pricing perspective.</i></p>	<p>Ex ante disclosures of most restrictive licensing terms should not be made mandatory.</p> <p>Many SDOs forbid Technical Committees or Working Groups from considering commercial IP terms as part of technology selection for a standard (see for example Sections 2.2 and 4.1 ETSI Guide on IPRs (Version 41)).</p> <p>Anticipating likely terms for access to certain intellectual property is important, but it can be impossible for the IP owners or SDOs to gauge the FRAND licensing conditions at an early stage of the standard development activities and outside the context of a particular licensing negotiation.</p>
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