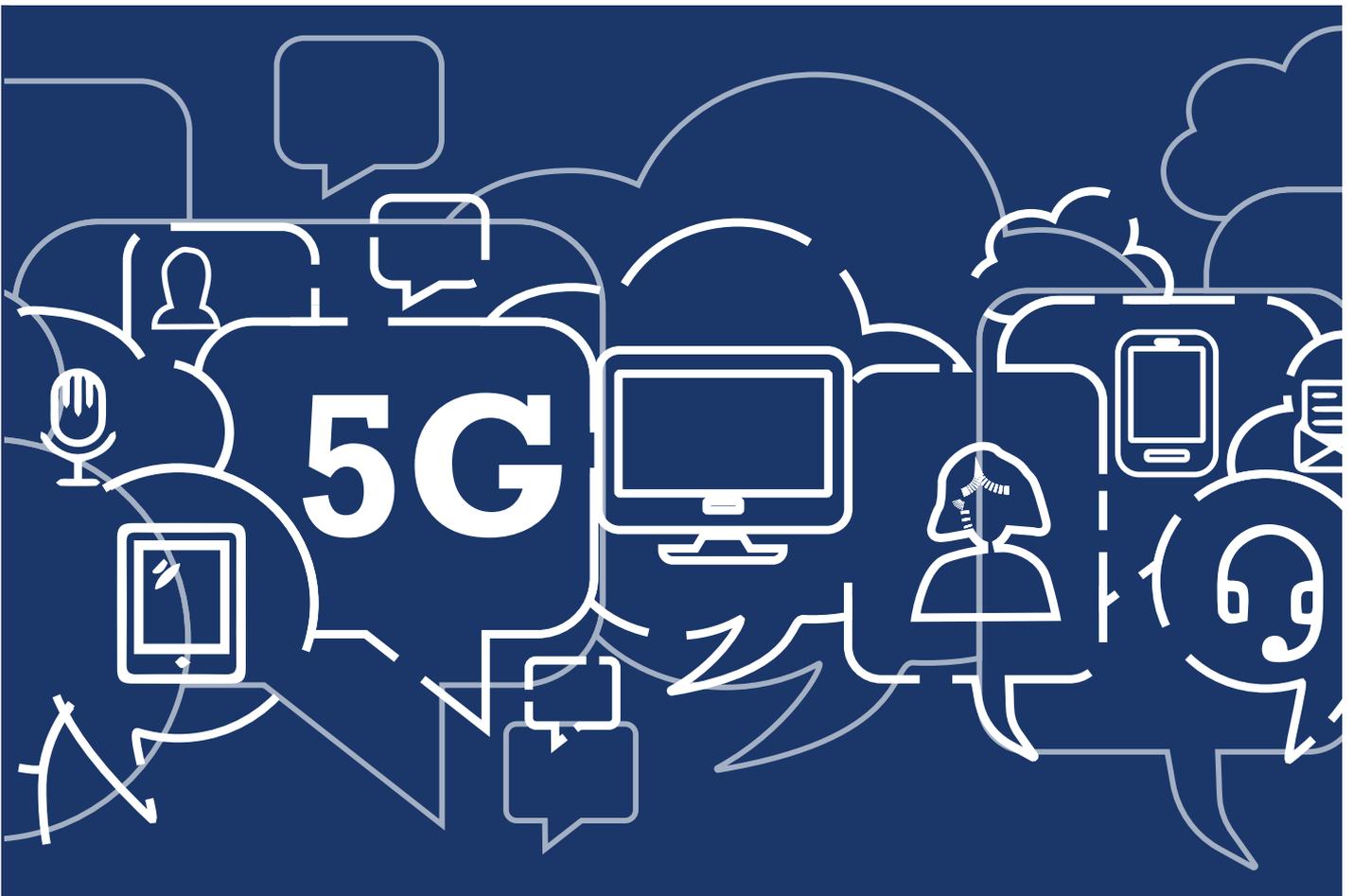




Intellectual  
Property  
Office

# Standard Essential Patents and Innovation

Summary of Responses to the Call for Views





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# Executive Summary

**Introduction.** Our aim is to produce the optimal intellectual property (IP) framework for the UK that will promote innovation and creativity both now and, in the future, while supporting the government’s ambitions set out in the Innovation Strategy<sup>1</sup> and Diversification Strategy ([Government’s Telecoms Diversification Strategy](#)<sup>2</sup>). The IPO has been conducting a call for views to investigate whether the ecosystem around Standard Essential Patents (SEPs)<sup>3</sup> is functioning efficiently and effectively and strikes the right balance for all entities involved. The purpose is to help assess whether government intervention is required.

**Section 1 - The balance of the ecosystem and benefits to innovation and consumers.** Many respondents said that a balanced ecosystem was essential to supporting innovation and competition. Respondents also pointed to the benefits of standardisation for innovation and consumers in sectors which require technical interoperability. Some said no change is needed or that there is no evidence of a problem. However, others said that the system is imbalanced, either in favour of SEP holders<sup>4</sup> or implementers. Many respondents said that there were specific challenges which concerned them even if they thought that the system overall worked well.

We received many specific proposals for changes intended to benefit consumers, innovation, and competition in response to our opening questions and throughout. Responses discussed potential roles for Standard Development Organisations (SDOs),<sup>5</sup> commercial entities (including patents pools (see fn10)), regulators and the UK Government in contributing to a balanced framework and protecting the interests of consumers.

## Section 2 - Competition and Market functioning

**Competition issues competition law and guidance.** Some respondents said there were no issues in respect of market power<sup>6</sup> in relation to SEPs. These pointed to the rapid adoption of standardised technology and other indicators in support of this. Others argued that the requirement to offer licences on fair, reasonable and non-discriminatory (FRAND) terms meant that SEP holders could not exercise potential market power derived from the incorporation of their technology in a standard.

However, many respondents said that there exists an imbalance of power to influence prices in SEP negotiations. Some SEP holders said implementers derive market power from the requirement to offer FRAND terms, which gave them the ability to “hold-out”<sup>7</sup> or delay entering into licences, while these terms were negotiated and litigated. Most implementers said that SEP holders do exercise market power, and some argued that SEP holders used the threat of injunctions to coerce implementers accept non-FRAND licences (so called “hold-up”<sup>8</sup>). Similarly, there were a mixture of views on whether there were wider issues related to competition and market functioning. Issues discussed

1 [UK Innovation Strategy: leading the future by creating it - GOV.UK \(www.gov.uk\)](#)

2 [5G Supply Chain Diversification Strategy - GOV.UK \(www.gov.uk\)](#)

3 A patent which protects technology which is essential to implementing a standard is known as a standard essential patent (SEP).

4 “SEP holder”. A company that holds one or more patents that have been declared essential to a standard, and that it thereby commits to license on FRAND (fair, reasonable, and non-discriminatory) terms. Also referred to as a “SEP owner”. “Implementer”. A company that manufactures goods and/or services in compliance with an industry standard, by directly or indirectly using technology declared essential to a standard.

5 An organisation that is primarily engaged in activities such as developing, coordinating, promulgating, revising, amending, reissuing, interpreting and otherwise maintaining standards (with input from industry and technical experts) to meet the needs of an industry or field. Also known as a “Standard Setting Organisation” (SSO).

6 Market power is defined by the Organization for Economic Co-operation and Development (OECD) as ‘the ability of a firm (or group of firms) to raise and maintain price above the level that would prevail under competition. The exercise of market power leads to reduced output and loss of economic welfare.’

7 So-called ‘hold-out’ refers to the practice where an implementer delay agreeing a licence in order to escape payment of royalties or to pressure the SEP holder to agree to a lower licence fee than may be fair or reasonable. There is lack of agreement on what behaviour by an implementer constitutes hold-out. See Section 2 on competition and market functioning for more views on hold-out.

8 So-called ‘hold-up’ refers to the practice where a SEP holder demands an excessive license fee above a fair and reasonable rate. Please see Section 2 of this report for more information on market power and for more responses related to hold-up and market power.

included barriers to entry and market exclusion; “tying and bundling<sup>9</sup>” of patents; and negative impacts of UK courts determining global licensing terms. Both sides of this debate submitted examples and court case evidence in support of their arguments.

A number of responses did not call for any changes to be made to competition law or guidelines. Some pointed to the benefits of patent pools<sup>10</sup> in addressing issues of pricing. On the other hand, some called for changes to address their concerns. Some called for changes to legislation such as the Patents Act 1977 to restrict the use of injunctions, or for the establishment of a tribunal to determine prices. Some also called for change to the Horizontal Guidelines<sup>11</sup> which cover issues of potential market power in relation to SEPs, or for investigations by the Competition and Markets Authority (CMA).

### Section 3 - Transparency

**Transparency of essentiality, and over-declaration<sup>12</sup>.** Respondents discussed the challenges for licensees of determining which patents were truly essential to the standard. Many respondents put the issue of transparency of essentiality of SEPs in the context of the policies of SDOs. Some SDOs, such as the European Telecommunications Standards Institute (ETSI) which produces telecommunications standards, require disclosure of patents which merely have the potential to be essential to a standard. This is so that they can be the subject of a commitment to offer FRAND terms before being incorporated into the standard. Some said this would naturally lead to so called “over-declaration” but that this was not genuinely problematic. Others said that over-declaration created serious problems. These included uncertainty, costs and inefficiencies for firms seeking to negotiate licences or involved in litigation, and asymmetry of information between negotiating parties and effects on prices.

**Essentiality checking.** Some saw no need for an independent third-party essentiality checking service, because there was not a problem or because the parties involved in the negotiations were better placed to carry out the checks. Others stated that any such checks must be voluntary or that there must be recourse to the courts for essentiality checking. Others pointed to the existing essentiality checking services provided by patent pools in some sectors. However, some argued there was a need to introduce independent third-party checks and saw a role for governments, regulators and patent offices in prescribing how these should be carried out. Some thought patent offices could carry out such checks themselves. A number of respondents commented on the appropriate methodology for essentiality checks and the use of databases.

**Legal certainty.** We asked whether greater legal certainty could be provided for essentiality checks and, if so, how. Many respondents, both SEP holders and implementers, said that a legally binding decision on essentiality and non-essentiality could only be made by the courts. Some respondents said it would be impractical to determine essentiality with legal certainty for more than a small number of patents or that this would require successful assertion of each and every SEP in a portfolio.

9 A European Commission discussion paper defines ‘tying’ as occurring “when the sale of a product is conditioned to another transaction. An individual or a company agrees to sell the product only if its purchaser agrees to acquire another product”. It defines bundling as occurring “when a set of several products is sold in one sole ‘package’”. See [https://ec.europa.eu/competition/antitrust/art82/024\\_en.pdf](https://ec.europa.eu/competition/antitrust/art82/024_en.pdf)

10 Patent pools are defined as an agreement between two or more parties to license one or more of their patents to one another or to third part (see 1.22)

11 The Competition and Markets Authority (CMA) has published a Call for Inputs in relation to [Retained Horizontal Block Exemption Regulations – R&D and specialisation agreements](#). The CMA’s review includes consideration of the existing European Commission guidelines on horizontal cooperation agreements, which among other things, covers competition law guidance on standardisation agreements and FRAND terms. Cooperation is of a ‘horizontal nature’ if an agreement or concerted practice is entered into between actual or potential competitors.

12 In the ETSI IPR Policy, “declaration” refers to a commitment by a patent owner that ensures their patent is available for implementation of a standard. For example, a declarant making a commitment that their patent is licenced on FRAND terms. A disclosure informs an SDO of specific patent(s) that the patent holder believes may or may become essential to a standard. Responses contained a mixture of the uses of the terms “declaration” and “disclosure”. However, it was not clear to us those responses always observed this distinction when using these terms. In summarising we have tended to use the term most used which was “declaration” in response to our questions about over-and under-declaration.

**Transparency of pricing.** We asked about whether there was sufficient transparency of licensing rates when entering into a negotiation, and whether some pricing transparency would be appropriate. Some argued there was sufficient transparency of pricing in markets for the most standardised technologies, for example cellular technology. Some also said that pricing transparency was difficult for markets in new technology, but that pricing becomes transparent as markets evolve. Some also gave the example of the transparency of pricing provided by public disclosures of prices by some patent pools.

However, several respondents did not think there was sufficient transparency. They raised specific concerns about the use of non-disclosure agreements in licensing terms. Some said this limited the availability of information about terms, made negotiation more difficult and created scepticism about whether licensees were being offered the best rate. We received a number of proposals to improve price transparency including to remove such restrictions in licensing agreements. Some respondents said that truly comparable licences should be made available during negotiations. Other examples included requirements for SEP holders to publicly disclose rates, or to disclose rates to a suitable body such as the relevant SDO, the IPO, a competition authority, or a tribunal similar to the Copyright Tribunal.

**Charging different FRAND rates to different licensees.** We also asked whether there is a justification under FRAND to charge implementers different rates when using the SEP for the same purpose. Some SEP holders said that different approaches or methodologies might be used by different SEP owners to negotiate royalty terms, and all may be consistent with the FRAND concept because they reflect the market-based value of the licensed SEPs or differences in the value created by different uses of the technology (e.g. in cars compared to domestic appliances). Some responded that the Supreme Court in their judgement in *Unwired Planet*<sup>13</sup> rejected the argument that differences in pricing terms for SEPs is presumptively problematic and that the non-discrimination element of FRAND does not mean that every licensee is entitled to the same rate, even similarly situated licensees.

However, several respondents said that that SEP holders bound by the FRAND commitment have no justification to charge similarly situated users differently. Some respondents, mainly implementers, also added that they disagreed with arguments which said that differences in price were justified on differences in the value of end-product technology. These issues are further summarised below.

## Section 4 – Patent infringement and remedies

**Levels of litigation.** Some respondents said the current UK patent system and approach to SEP licensing generally works well. However, others said there were relatively high levels of litigation, and both SEP holders and implementers said that this created problems for them in terms of costs or finance. Views on the nature and causes of these problems differed and reflected the differing views on issues such as “hold-up” and “hold-out”, and transparency more broadly.

**Global fairness and the decisions of national courts.** Respondents were asked whether the current patent regime creates a fair global market. While there were some comments on the fairness or otherwise of the overall system, many respondents highlighted specific respects in which they said it was not fair. These included variation in the approaches of courts to injunction or damages, including protectionism, variations in the costs of enforcement, and unfair practices by SEP holders or implementers. Many responses said that the UK Courts were a favoured destination for SEP holders or perceived to be friendly to SEP holders. Many responses discussed the UK court’s determination of the terms of global licences in the case of *Unwired Planet*<sup>14</sup>, with differing views on whether that has contributed to unfairness, as discussed below.

13 *Unwired Planet International Ltd v Huawei Technologies (UK) Ltd* UKSC 2018/0214; <https://www.supremecourt.uk/cases/docs/uksc-2018-0214-judgment.pdf>.

14 *Ibid.*

**Enforcement.** Respondents were also asked about the sufficiency of the framework for enforcement of SEP and the impact of the use of injunctions and anti-suit injunctions<sup>15</sup> (ASIs). Some respondents said enforcement was costly and slow, or difficult. Most SEP holders said that injunctions should be available in SEP cases as for other patents, and that case law already provided a framework for their appropriate use in SEP cases. Most implementers said injunctions should not be available or should only be available in rare circumstances. They argued the threat of an injunction can be used to pressure a licensee into accepting non-FRAND terms, and that in making a FRAND commitment the patent holder had foregone any right to exclude others from the technology incorporated into the standard.

Some of those who said the current system left incentives for hold-out suggested that enhanced damages could be awarded instead of or in addition to injunctions. Some of those who said that injunctions should be used only in rare circumstances said that policy statements or changes to the Patents Act 1977 were needed.

**Anti-suit injunctions.** Many respondents commented on the use of ASIs, which prevent a party from commencing or continuing the same legal action in another or foreign jurisdiction or enforcing a judgment obtained in foreign legal proceedings. Some argued that ASIs could be useful in avoiding duplication of disputes and conflicting decisions in different jurisdictions. Some also argued that they must be available to implementers to prevent SEP holders choosing to pursue legal action in the most favourable jurisdiction to them. However, several respondents said that ASIs were problematic, adding to the cost, complexity and length of litigation or depriving SEP holders of their ability to enforce their patents. Some respondents said that ASIs had been used in the Chinese courts without due process. Respondents also said ASIs had been used to assert jurisdiction as a response to the determination of global FRAND licensing terms in the case of *Unwired Planet v Huawei*.<sup>16</sup>

We received several proposals for discouraging the use of ASIs. One proposal was that the use of an ASI should be treated by the courts as a sign of being an unwilling licensee. Others said that the issue could not be solved at a national level and that their needed to be a convergence between jurisdictions as to when injunctions should be available in SEP disputes, or a single international forum for arbitrating disputes related to global licences.

## Section 5 – Licensing of SEPs

**Emerging technologies.** We asked how the framework for SEPs and FRAND ecosystem might adapt for emerging technologies. Some respondents, including most SEP holders argued that the system generally worked well to encourage innovation, and that SEPs licensing was an enabler of technology take up. Some SEP holders, licensing administrators and others said that patent pools could offer a means for implementers in new markets to implement standardised technologies. Others, including many implementers, responded that concerns they had about the ecosystem generally applied, or especially applied, to emerging technologies. Some responses discussed specific concerns around impacts on the Internet of Things (IoT) and UK small-to-medium enterprises (SMEs). Concerns included the impact of court decisions seen as favourable to SEP holders; cost, uncertainty and complexity, transparency, lack of information and understanding; and bad faith in negotiations. Responses also discussed the basis of licensing rates and who should be able to obtain a licence, which are discussed more generally below.

A number of respondents said that SDO should update their policies to accommodate emerging technologies and submitted specific proposals for change. Some respondents said there was no need for further government regulation in this area. Others said the UK should change the law or provide guidance.

<sup>15</sup> An anti-suit in junction (ASI) is an order made by a court preventing a party before it from commencing or continuing the same legal action in another or foreign jurisdiction or enforcing a judgment obtained in foreign legal proceedings.

<sup>16</sup> Ibid. No.13, *Unwired Planet v Huawei*.

**Flexibilities to improve efficiency for implementers.** We asked whether flexibilities existed which could improve the efficiency of obtaining a licence. Some respondents said FRAND arrangements provided sufficient flexibility and that court decisions, such as *Huawei v ZTE*<sup>17</sup> and *Unwired Planet* provided a balance for both parties in negotiations, and guidance to settle disputes on a case-by-case basis. Some respondents also responded to say that the practice of SEP holders choosing to licence at a specific level of the value chain<sup>18</sup>, such as to end product manufacturers was efficient, and did not prevent access to technologies for those at other points on the value chain (such as component manufacturers).

However, many implementers and some others, argued that there were a number of sources of inefficiency for implementers. Difficulties stated included the preference of SEP holders to provide licences at a specific, downstream, level of the value chain; the use of injunctions; transparency and disclosure; bad faith in negotiations; and broader challenges of obtaining a FRAND rate. Some respondents proposed changes to the law to address the difficulties they said implementers faced. These included changes to UK law to restrict the use of injunctions or the introduction of principles to provide guidance on FRAND negotiations. Some respondents said the CMA should amplify the guidance which already exists in the Horizontal Guidelines to address the issue of the point in the value chain at which a licence is offered. Some respondents also suggest sources of potential improvements besides changes to the IP framework, such as greater provision or use of patent pools.

**Other means of improving efficiency.** Responses to a follow up question on other means of efficiency around SEP licensing generally said improvements could be made. Examples of proposals which have not been summarised elsewhere included more specific proposals aimed at providing greater transparency of licences (such as requirements to disclose and publish licensing rates); and proposals to incentivise good faith negotiations by requiring a punitive element for bad faith behaviour by licensors or licensees. Some said SME implementers could benefit from better awareness or understanding of licensing practices in response to this question. Some pointed to existing guidance which could be used. Some suggested guidance on negotiations and the information which should be provided would help improve efficiency.

**Patent Pools.** Many respondents said that patent pools can improve the efficiency of SEP licensing, for example by providing transparency of pricing, and reducing costs and delays. However, some said that it could take years to establish a patent pool at critical mass and that they were more effective in some technology sectors than others. Some respondents said they saw some problems associated with patent pools (even if they also saw benefits). Some respondents said that having more than one patent pool for a standard made negotiating a licence more complex. Some respondents said that patent pools could raise costs for smaller SEP holders or licences. Some respondents had concerns about the transparency of ownership of patent pools and wanted more transparency about the licensing terms offered within them. They had similar concerns to those which have been raised in relation to bilateral negotiations, for example, about the willingness of implementers to enter into licences, or the point in the value chain at which licences are offered, were said to be concerns in the context of patents pools too.

No respondents said that patent pools should be mandated, and many said that to do so would be problematic. Some respondents said that the establishment of patent pools was best left to licensing administrators. However, some respondents said States or SDOs could have a partial role, such as encouraging or facilitating their establishment or providing guidance on their structure or terms.

<sup>17</sup> *Huawei Technologies Co. Ltd v ZTE Corp. and ZTE Deutschland GmbH*, C-170/13. In the *Huawei* decision the CJEU set out a number of steps that should be followed in SEP patent licensing negotiations. The steps set out in the *Huawei v ZTE* decision were in relation to the ruling by the CJEU that a SEP holder that has committed to license its SEPs on FRAND terms may be found in breach of abuse of a dominant position (Article 102 of the Treaty on the Functioning of the European Union) by seeking an injunction against a potential licensee in certain circumstances.

<sup>18</sup> The value chain refers to the process and entities involved in adding value to a product from start to finish, for example combining raw materials to produce components, or combining components to produce an end product. The supply chain refers to all entities that handle a product up to its distribution to the consumer. Unlike the value chain, members of a supply chain do not necessarily add value, they may include intermediaries who simply transport inputs from one entity to another. Responses contained a mixture of uses of the terms “value chain” and “supply chain” even when arguing to similar conclusions. We have used the term that seemed most appropriate to the points of view we have attempted to summarise.

**Pricing.** We asked about the best way to resolve disputes around pricing and for views on related issues. Some respondents said that settlement of disputes over pricing was best left to the courts. Some said they favoured the practice by some courts of using comparable licences in settling disputes about an appropriate FRAND rate. We also received many responses on the issue of point in the value chain at which licences should be offered (e.g. to a component manufacturer or to an end product manufacturer) and the distinct but related issue of the basis for setting royalties (e.g. in relation to a component or an end product).

Several respondents said that the FRAND commitment should be interpreted to mean that standardised technology should be accessible to all, rather than licensed to all. Respondents submitted views on practical challenges and complexities of negotiating and enforcing licences if they were required to license to all and associated transactions. Licensing to a single point on the value chain was more efficient. Some further argued that the end product manufacturer was the most efficient point at which to provide a licence. Some said that component manufacturers are sufficiently protected by licensing terms which grant rights not just to make but to “have made” the technology covered by the patent.

However, several others said that licences should be available throughout the value chain to any company that wishes to take a licence. Some said refusal to supply licences to downstream component manufacturers would impact on innovation. For example, one respondent said it could harm not their ability of component manufacturers to innovate on top of the standard. Other respondents argued that while component suppliers are unable to obtain licences to indemnify their customers for patent infringement, companies seeking to develop innovative products based on components face uncertainty regarding their exposure to infringement claims. Some argued that widening SEP licensing to component manufacturers would encourage new entrants and support competition.

On the related issue of the product in relation to which royalties are calculated, some SEP holders and others argued that royalties based on the end product were appropriate, either because this was most practical or because it better captured the value of the contribution of the standardised technology to the consumers. On the other hand, some implementers and others argued that the economic basis for calculating rates payable should be the selling price of the smallest saleable component of a product that implements the SEP (such as a microchip). They argued that this ensures royalties reflect the value added by the SEP, and not the value of any further end product innovation by the implementer.

We asked about the utility of schemes which define allowable costs to be used in the calculation of royalties. Several respondents said that methodological approaches already recognised by the courts should be used. Many respondents, both SEP holders and implementers, responded against introducing more formalised pricing methodologies or rules, as this would be overly inflexible or “one size fits all”.

Respondents discussed the merits of different pricing methodologies. Some advocated use of a fixed royalty per unit. Others advocated schemes which calculate royalties as a percentage of allowable costs, for example in relation to the features which derive value from the patented technology. Some respondents saw a role for a board or expert groups in making assessments of costs or value relevant to setting royalties. Some respondents said that how proposed royalties are calculated should be made more transparent to licensees.

## Section 6 -SEP Litigation

**Global FRAND terms.** We asked about the benefits or otherwise of national courts determining the terms of global FRAND licences, as seen in the Unwired Planet case<sup>19</sup>, which was the subject of a UK Supreme Court decision on appeal. Several respondents stated that the setting of global licensing rates can be more efficient than pursuing litigation in multiple jurisdictions. Some responded that global licensing decisions by the courts were reflecting industry practice of using global licences, and several SEP holders generally supported the approach of the UK courts. Some said that in the Unwired Planet decision the court was not forcing a potential licensee to accept a global licence. Rather they had the option to accept a UK limited injunction instead.

However, several respondents, including many implementers, said national courts should not be able to compel a party to accept a determination of global licensing terms. Many respondents saw this as extra-territorial judicial over-reach and said the effect was to encourage forum shopping and the use of ASIs. Some said global FRAND determinations heightened concerns about the threat of injunctions being used to compel a potential licensee into accepting terms which are not FRAND, and undermined the ability of potential licensees to challenge patents in different jurisdictions. Some said decisions made by the UK courts could discourage innovators away from the UK market, or threaten innovation by UK businesses, including SMEs. Some of those who said the decision was problematic called for government intervention or clarification regarding the precedent set. Others said that international solutions were needed.

**Role of courts and ADR.** We asked about the efficiency of case-by-case determination of FRAND licensing terms, and about alternative dispute resolution (ADR<sup>20</sup>) mechanisms, such as mediation or arbitration. Many responses said court cases were not an efficient means of making determinations, and that litigation was costly and time consuming. Despite this, many of those respondents and others said that the courts are the only or best way of making determinations where negotiating parties can't agree. The transparency of details of FRAND licences and guidance on expectations of behaviour provided by the courts were benefits highlighted by many. Nonetheless some said that negotiated solutions or use of other forms of dispute resolution should be encouraged.

Many respondents said that existing means of ADR can be effective, although both parties have to agree to enter into this voluntarily. Advantages stated included lower cost, speed, confidentiality, flexibility, the absence of appeal, and the potential to be use for cross jurisdictional disputes. Disadvantages stated included that there was a lack of transparency and ability to provide precedents that arbitration was not always lower cost than litigation, the absence of provision for disclosure of prior licences, and a lack of technical expertise or jurisdiction.

Most respondents who commented said that ADR should not be mandatory, and some proposed incentivising voluntary use of existing ADR mechanisms. Others proposed changes to address what they saw as the disadvantages of existing mechanisms. On the other hand, some respondents proposed that requirements to enter into ADR could be mandated by SDOs. Some respondents said there was a need for new forums for arbitration. A few respondents proposed there should be a new forum at an international level, which could be modelled e.g., on the UK Copyright Tribunal.

<sup>19</sup> Ibid. No.13, Unwired Planet v Huawei.

<sup>20</sup> ADR here is used as a generic term that refers to ways of resolving disputes that don't involve litigation in court and which includes arbitration and mediation.

## Next steps

The IPO would like to thank all contributors to the call for views on Standard Essential Patents and Innovation. The responses provided valuable information and frequently pointed to relevant evidence and data to consider.

Many respondents stated the importance of standards and SEPs for innovation and consumers. We found that both SEP holders and implementers reported problems related to the efficiency or effectiveness of the ecosystem around SEPs. However, there was little consensus on the nature, extent, causes, and impact of problems in this area, with SEP holders and implementers often advancing opposing arguments in response to the questions posed.

There was also little consensus on the need for government to intervene. Some SEP holders and others argued for no change or minimal changes. Some respondents pointed to the potential of market led solutions such as patent pools. However, some implementers and others called for government intervention, through changing legislation, issuing guidance, or establishing or strengthening institutions or processes. Some of these proposals were intended to counter the effect of decisions which had been subject to careful reasoning in the UK courts, including the Supreme Court. And a number of respondents called for changes at an international level which might require co-ordination or collaboration between States.

The IPO believes that standards and standard essential patents will be of growing importance to the UK economy, and the government's ambition for the UK to be a science and technology superpower and innovation hub by 2035. Given the breadth of issues raised and the divergence of the views on the case for government intervention, the IPO will require a further period while we assess the issues and as appropriate, consider the merits of the proposals submitted. During this period, we will engage with businesses and others to ensure we have understood their concerns and seek further evidence where needed. We will report our findings to UK ministers in 2023 and would expect any significant policy interventions to be subject to consultation.

We will continue to work closely with other UK public authorities and government departments. The Department for Culture, Media and Sport will contribute to this ongoing work to drive forward its ambitions set out in the 5G supply chain diversification strategy. Ministry of Justice will contribute to consideration of issues concerning dispute resolution and access to justice. The CMA envisages preparing and consulting on draft guidance on horizontal agreements later in 2022, including on standardisation agreements. Responses to this IPO call for views on SEPs will inform any content in the CMA's draft guidance that might relate to SEPs and FRAND.

We will also continue to engage at an international level with other patent offices and others, recognising that SEPs are used by global businesses and technologies, and some of the responses we received call for global collaboration to be considered.

# Background

Intellectual property (IP) is vital to the UK economy: between 2017 and 2018, investment in intangible assets grew by 3.3% to an estimated £169.2 billion. This was greater than the total tangible investment in 2018, which fell 3.9% to £151.0 billion. Use of IP has been linked with an increase in firm performance, with ownership of IP rights (IPRs) being strongly associated with improved economic performance at firm level.<sup>21</sup>

The UK starts from a position of strength, ranked 4th in the World Intellectual Property Organization's (WIPO) Global Innovation Index 2021<sup>22</sup> and 2nd in the US Chamber of Commerce Global Innovation Policy Centre (GIPC) International IP Index 2022.<sup>23</sup> Our IP system is consistently highly regarded around the world.

However, the UK IP system's ability to keep pace with technological change is central to our continued high performance. The digital sector plays an important role in the UK economy, contributing £150.6bn in 2019, accounting for 7.6% of UK gross value added, representing an increase of 6.1% from 2018.<sup>24</sup>

We have seen an extensive rise in the use of wireless technologies (3G, 4G, 5G, Wi-Fi, etc.) in telecommunications and the automotive industry (for example, providing in-vehicle and inter-vehicle connectivity and in navigation systems). This in turn has seen increased attention given to issues surrounding the licensing of patents and use of standards.

## The role of technical standards and SEPs in technology sectors

A technical standard is an agreed or established description of a technical process or task that is shared with others to promote interoperability of systems or convergence of practice in an industry. These are usually produced by Standard Development Organisations (SDOs)<sup>25</sup>, established for the purpose of creating standards, with inputs from industry and technical experts. Trade bodies, government organisations and similar entities can also create technical standards. The importance of standards is growing with the increasing globalisation of commerce, the emergence of new technologies and the need for interoperability.

Technical interoperability standards are increasingly relied upon to enable components developed by different manufacturers, to be able to seamlessly 'talk to' each other. They are particularly important in technologies which allow us to communicate, to receive and store ever larger quantities of data, and efficiently access or stream content online e.g., music files or high-definition video streams. In new markets, we have seen the requirement for products including digital, the automotive sector and the Internet of Things (IoT).

Standards, like patents, can span across multiple disciplines and sectors. In some cases, standards require the use of specific technologies protected by patents. A patent that protects technology which is essential to implementing a standard is known as a standard essential patent (SEP). Without using the methods or devices protected by SEPs, it is impossible for a manufacturer (or implementer of the standard) to create standard compliant products, such as smartphones or tablets.

21 [https://euipo.europa.eu/tunnel-web/secure/webdav/guest/document\\_library/observatory/documents/reports/IPContributionStudy/IPR\\_firm\\_performance\\_in\\_EU/2021\\_IP\\_Rights\\_and\\_firm\\_performance\\_in\\_the\\_EU\\_en.pdf](https://euipo.europa.eu/tunnel-web/secure/webdav/guest/document_library/observatory/documents/reports/IPContributionStudy/IPR_firm_performance_in_EU/2021_IP_Rights_and_firm_performance_in_the_EU_en.pdf)

22 WIPO Global Innovation Index 2021 [https://www.wipo.int/edocs/pubdocs/en/wipo\\_pub\\_gii\\_2021.pdf](https://www.wipo.int/edocs/pubdocs/en/wipo_pub_gii_2021.pdf)

23 Global Intellectual Property Centre (GIPC) International IP Index 2022 2022-IP-Index-Final-Report.pdf [theglobalipcenter.com](http://theglobalipcenter.com)

24 <https://www.gov.uk/government/statistics/dcms-economic-estimates-2019-gross-value-added/dcms-economic-estimates-2019-provisional-gross-value-added>

25 Ibid. No.5.

Some SDOs have IPR policies in place that ensure SEP holders provide a licence to implementers of the SEP on fair, reasonable and non-discriminatory (FRAND) terms. Without such an obligation, a single patent holder could refuse to license and prevent companies from implementing the standard.

The number of declared SEPs doubled on average every five years between the early 1990s to 2014<sup>26</sup>. As of 2020, around 95,000 patents had been declared essential for the 5G standard.<sup>27</sup> The IoT sector had 7.6 billion active IoT devices at the end of 2019, a figure predicted to grow substantially over the next 10 years.<sup>28</sup>

## Diversification of the telecoms landscape

In November 2020 the [Government's Telecoms Diversification Strategy](#) made a number of recommendations to encourage new vendors into the market, including sunseting (phasing out) legacy networks, encouraging new technologies and funding research and development (R&D). It also commissioned the Diversification Taskforce which reported in April 2021. The [Taskforce](#) noted that SEPs had the potential to serve as considerable barriers to diversification and recommended some actions for the government to consider.

Resolving these issues is central to enabling effective and sustainable diversification of the telecoms supply chain, leading to greater competition and innovation. Increasing transparency and access to patent portfolios may improve how the market operates. The Diversification Strategy seeks evidence to better understand how transparency can improve market functioning and whether there are inefficiencies that need to be tackled. This call for evidence will complement work already under way as part of the Diversification Strategy.

### International context

The UK recognises the need to ensure our own domestic legislative and policy frameworks keep pace with global developments and challenges for SEPs licensing. An effective global ecosystem is key to enabling innovative business and technologies to thrive. Overcoming the current challenges of the SEPs framework requires global collaboration to reflect the fact that business is global. The United States, European Union and Japan have recently considered or continue to consider policies relating to SEPs. The UK will consider which issues will be best served through collaboration with our international partners.

### Responses to the Call for Views

The IPO published its Call for Views on 7 December 2021 running for 12 weeks and closed on 1 March 2022. In that time, the IPO held virtual roundtables with various stakeholder groups including SEP holders, implementers, legal & academic organisations and sector & innovation networks over a 3-week period between 28 January 2022 and 15 February 2022.

The aim of the stakeholder roundtables was to provide industry with an overview of the Call for Views publication and to invite a discussion relating to themes within the publication, particularly on competition & market functioning, transparency in the system, and the patent licensing & litigation frameworks.

The IPO received a total of 56 written responses from a variety of stakeholder groups to a total of 27 questions across 6 broad themes. This publication summarises the responses to each question thematically. The summary involves a necessary abbreviation of what was submitted. Some respondents chose to group their responses to

26 ITU (2014) Understanding patents, competition and standardization in an interconnected world [https://www.itu.int/en/ITU-T/Documents/Manual\\_Patents\\_Final\\_E.pdf](https://www.itu.int/en/ITU-T/Documents/Manual_Patents_Final_E.pdf)

27 IPLytics - Fact finding study on patents declared to the 5G standard (2020) [https://www.iplytics.com/wp-content/uploads/2020/02/5G-patent-study\\_TU-Berlin\\_IPlytics-2020.pdf](https://www.iplytics.com/wp-content/uploads/2020/02/5G-patent-study_TU-Berlin_IPlytics-2020.pdf)

28 Global IoT market to grow to \$1.5trn annual revenue by 2030 | IoT Now News & Reports ([iot-now.com](http://iot-now.com))

different questions in one place. Where helpful we have sometimes grouped our summary of responses to reflect this and to avoid duplication. All views reported are those of respondents and should not be taken as the views of the IPO.

# Summary of Responses

## 1. Relationship between Standard Essential Patents, innovation, and competition

### Question 1.

How does the SEPs ecosystem work effectively in a balanced way to support competition and innovation?

#### Summary of themes:

Many responded to this introductory question by setting out their broad position on the question of change. The different themes in the responses were:

- **The benefits of a balanced ecosystem.** Various respondents said that a balanced ecosystem is essential to support competition and innovation
- **The benefits of standardisation for competition and innovation.** Some respondents said standardisation, FRAND terms and the Horizontal Guidelines work well to support competition and innovation
- **No change.** Some said no change is needed, as there is no evidence of a problem
- **Balance favours the implementer.** Some responded that there is little incentive on implementers to agree a licence, so SEP holders need protections such as the availability of injunctions
- **SEPs ecosystem works well, with some challenges, either for SEP holders or implementers.** Issues raised included availability of SEP licences; appropriate royalty rates; SME involvement in standards development; hold-up, hold-out; transparency of FRAND rates and conditions; and over-declaration of patents to a standard
- **Balance favours the SEP holder.** Some responded that SEP holders use market power, court decisions to determine global rates, and levels of litigation to disadvantage implementers
- **View on the UK Government's role in maintaining a balanced ecosystem.** Some said that the UK should develop a policy framework and stay active in international forums to help maintain a balanced framework

## The benefits of a balanced ecosystem

- 1.1 Some respondents suggested that a balanced ecosystem is essential without commenting as to whether the current balance was right. A balanced ecosystem would provide standard developers the incentive to innovate, while providing implementers access to standardised technologies.

## The benefits of standardisation for competition and innovation

- 1.2 Some respondents, mostly SEP holders, suggested that standardisation has sped up the progress of innovation and competition, particularly in the mobile communications sector. One SEP holder explained the rate of technology development in this space is a result of the intense competitive nature of the standardisation process in combination with co-operation between companies to develop the standard. Another respondent added that standards are important enablers of competition and innovation in sectors that require interoperability. Respondents stated that without the presence of a SEPs ecosystem, competition and innovation would be limited to proprietary systems resulting in a slower rate of progress compared to what is seen today.
- 1.3 SEP holders said that ETSI's (the European Telecommunications Standard Institute) IP policy and the FRAND framework has been integral to the speed at which innovation and competition has grown in this context. One SEP holder explained that FRAND licensing has been 'a main pillar' of the ecosystem and that the framework provided by the Court of Justice of the European Union (CJEU) in *Huawei v ZTE* effectively balances the interests of both implementers and SEP holders. In the *Huawei* decision the CJEU set out a number of steps that should be followed in SEP licensing negotiations.<sup>29</sup> A legal representative added that FRAND declarations allow SDOs to agree a standard knowing that it may be implemented and that licences would be available. They added, competition is enhanced by FRAND declarations, allowing implementers to enter markets before licences have been agreed.
- 1.4 One SEP holder stated The Horizontal Guidelines<sup>30</sup> approach to FRAND licensing supports the balance of incentivising SEP holders to develop new technologies and the wider adoption of standardised technology by implementers. They said this strikes the right balance to promote innovation and competition.
- 1.5 A legal representative stated that enabling SEP holders to enforce their rights is an important part of the ecosystem and supports innovation by ensuring contributors are fairly paid for their technology. A SEP holder stated that isolated FRAND disputes between implementers and SEP holders, even if publicised, do not result in any negative effects on competition.
- 1.6 Some responses touched on royalty free licensing and open innovation. One respondent suggested that allowing different licensing models, including royalty bearing and royalty free licences, is consistent with competition policy. They added that royalty free licensing is an important driver for innovation and competition and that reciprocal licensing on royalty free terms is pro-competitive. A consultancy referred to a study that looked at the interplay of open innovation and IP.<sup>31</sup> They found that for many small-to-medium enterprises (SMEs) in the IoT, blockchain and software-based ecosystems, other IP forms, such as copyright or trade secrets, may have been more of a priority over patents.

29 Ibid. No.17.

30 Guidelines on the applicability of Article 101 of the Treaty on the Functioning of the European Union to horizontal co-operation agreements (2011/C 11/01), accessible here: [https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52011XC0114\(04\)&from=EN](https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52011XC0114(04)&from=EN).

31 <https://www.cubicibuc.com/ip-for-smes-in-open-innovation>

- 1.7 Some respondents said that the current SEP ecosystem did not require any fundamental changes. One respondent stated that SEP intensive technology sectors do not show any form of market failure that requires regulatory intervention as a matter of IP or competition law. Another respondent added that UK initiatives should be cautious to not undermine current incentives. One respondent, a SEP holder, stated that there is no empirical evidence to demonstrate that there are systematic problems to be addressed. On the other hand, some respondents stated that the SEPs ecosystem does not effectively work in a balanced way to support competition.

### **Balance of the ecosystem favours the implementer**

- 1.8 Two respondents stated that the balance of the current SEPs ecosystem favours the implementer. To illustrate this, they suggested that implementers are in an advantageous position regarding open access to standards. They say that there is little incentive for some implementers to negotiate and conclude FRAND licences in a timely manner. One respondent added that injunctions are a necessary component of FRAND licensing. They further remarked that obtaining damages would leave SEP holders far from the position they would have been in had licences been concluded in a timely manner and in good faith. They also stated that a lack of diversity in the telecoms supply chain points to an imbalance in the SEPs ecosystem.

### **SEPs ecosystem works well, with some challenges**

- 1.9 Some respondents were generally positive about the current state of the SEPs ecosystem but stated challenges could be addressed to enable the ecosystem to better support competition and innovation. Those challenges include availability of SEP licences for all, what constitutes a reasonable royalty rate, limited SME involvement in standards development, hold-up<sup>32</sup> hold-out<sup>33</sup>, a lack of transparency of FRAND rates and conditions and over-declaration of patents to a standard.

### **Balance of the ecosystem favours the SEP holder**

- 1.10 Some respondents, mostly implementers, suggested that the balance of the current SEPs ecosystem favours the SEP holder. To support this, one respondent stated that the UK Supreme Court's decision in *Unwired Planet v Huawei*<sup>34</sup>, which set a precedent for global portfolio licences, sharply tilted the balance in favour of the SEP holder and claims that this decision makes the UK a less attractive place for innovation.
- 1.11 The same respondent added that SEP holders are improperly leveraging their market power to force licensees to pay excessive licensing fees. Therefore, encouraging hold-up. Another respondent added that this has competition concerns as there is the potential to reduce price competition and exclude or discriminate against certain companies by preventing access to a standard. Further, one respondent added that individual royalty payments are a restricting factor in their innovation process. One respondent added that the current ecosystem does not provide sufficient safeguards against hold-up or hold-out. One respondent pointed towards a lack of competition in standard development, stating that contributions to 5G standards are dominated by a few companies (with 75% of total made by 9 companies) and regional balance is poor. They also added that ownership of SEPs is similarly concentrated, claiming that approximately two thirds of all SEPs are owned by 7 companies.

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32 Ibid. No. 8.

33 Ibid. No. 7.

34 Ibid. No. 13.

- 1.12 Another respondent said that the SME community is concerned that the SEPs ecosystem is becoming increasingly litigious. They added that there are concerns that SEP holders are renegeing on their voluntary FRAND commitments. A respondent stated that SEP holders and implementers have not been able to find a consensus on a common industry licensing model for SEPs.

## Views on the UK Government's role in maintaining a balanced ecosystem

- 1.13 Some respondents stated that the UK Government has a role to play in striving for a balanced SEPs ecosystem. One respondent stated that the UK should develop a policy framework that guarantees the sustainability of the voluntary, inclusive, collaborative and consensus-based ecosystem that fosters standardised technologies. Another respondent added that the UK should stay active in international policy forums regarding SEP policy to strive for an ecosystem capable of enabling licensing negotiations and dispute resolution in a timely and efficient manner.

### Question 2.

#### What actions or interventions would make the greatest improvements for consumers in the UK?

##### Summary of themes:

Many SEP holders, and some others, responded to this introductory question by arguing for no change or no change without careful consideration. Some SEP holders and many implementers made specific proposals for change, which are expanded on in responses to other questions. The different themes in the responses were:

- **Benefits to consumers of a balanced ecosystem.** A variety of respondents said an ecosystem that looks after the interests of all parties would be of greatest benefit to consumers
- **Benefits to consumers of the current system.** Some said the incentives for innovation offered by the current patent system benefit consumers. SEP holders need to be able to enforce their rights
- **No change, or no change without careful consideration.** Some said that should be no change; others said that any intervention should be carefully considered
- **Greater transparency and increased competition.** Some respondents said greater transparency about SEP licences would indirectly benefit consumers. Increased competition and a larger supplier base would benefit consumers
- **FRAND licensing.** Some said changes within the current FRAND licensing regime would benefit consumers. These included addressing hold-up and hold-out
- **Patent pools.** Some respondents said that patent pools could bring benefits for consumers but multiple patent pools for the same standard could be damaging
- **Regulatory investigations.** Some responded that the Competition and Markets Authority (CMA) should investigate “anti-trust” and consumer issues and have increased powers to investigate licensing
- **SDOs.** One respondent said SDOs may be better placed to deal with SEP licensing issues, with government guidance
- **Consult consumers.** Some respondents said consumers’ views should be more central to the policy debate

## Benefits to consumers of a balanced SEP ecosystem

- 1.14 Several respondents, from a variety of stakeholder groups, stated that consumers would benefit from a balanced SEP ecosystem that looks after the interests of all parties within the ecosystem.

## Benefits to consumers of the current system

- 1.15 Some respondents stated that the current system is working well. A SEP holder said that retaining the current approach is ideal. If the UK's position is imbalanced one way or another it may diminish the industry's incentive to innovate. Therefore, consumers may lose the benefits of efficient and effective standardisation. Another SEP holder explained that the current framework is successful as it has fostered open ecosystems that drive innovation, promote competition, and facilitate interconnectivity. This would ultimately allow consumers to benefit from improved performance, choice, and price. Some respondents suggested that consumers would benefit from a wider adoption of standards in new markets where standards do not currently exist.
- 1.16 Two SEP holders argued that improvements for consumers would come from continuing to provide incentives for SEP holders to make investments in R&D. One respondent added that this could be enabled by allowing SEP holders to enforce their rights should infringement take place, ultimately giving rights holders assurances that they can collect FRAND royalties to recoup their initial investment. The same respondent added that if companies are not able to enforce their rights, there may be fewer technical solutions available and less consumer choice. The other SEP holder argued that an environment that supports R&D requires a robust IP system and appropriate court procedures, suggesting that these are in the consumer interest.
- 1.17 Another two SEP holders stated that the current retained competition law framework related to SEPs licensing should remain as the guidance that the UK should follow. They added that if the UK decides to follow a more restrictive approach to SEP holders' rights, their incentive to innovate may decrease. This would impact the availability and variability of technologies for the end consumer.

## No change, or no change without careful consideration

- 1.18 Seven respondents said that there are no changes needed at this time. A further eleven respondents said that any future intervention should be carefully considered, and evidence led.

## Greater transparency and increased competition

- 1.19 Some respondents suggested that greater transparency over prices related to SEP licences would benefit consumers. One respondent stated that publishing proposed royalty fees could allow competition between standards and ultimately reduce the cost to the consumer. Some respondents added that publishing sales data for a given patent portfolio or having the necessary information to value a SEP portfolio would help. Some respondents said that greater transparency over whether a patent is essential to a standard could indirectly benefit the consumer. One respondent added that a transparent licensing regime is essential for the development of IoT innovations. Some respondents stated that consumers would benefit from legislation leading to a more transparent licensing regime.
- 1.20 A trade association pointed toward introducing greater competition into the SEP ecosystem. They said that for network operators to sustain providing complex telecom services at reasonable prices, they require a larger supplier base of competing manufacturers that offer compatible products under the same standard.

## FRAND licensing

- 1.21 One respondent said that greater legal certainty in the determination of a FRAND licence will likely reduce legal costs, ultimately reducing costs for the end consumer. Some respondents stated that FRAND licences should be available to anyone who wants to implement a standard. One respondent stated that the availability of fully licensed connectivity modules would reduce cost uncertainty for businesses as well as reducing transaction costs for implementers. One respondent stated that enforcing FRAND terms among SEP holding companies would make improvements for consumers. Various respondents suggested that if issues related to hold-up or hold-out remain unaddressed, it may have an impact on the end consumer. One respondent stated that implementers should have responsibilities to demonstrate ‘willingness’ to take a FRAND licence. Some respondents argued for UK guidelines on SEPs and FRAND licensing.

## Patent pools

- 1.22 Patent pools are defined as an agreement between two or more parties to license one or more of their patents to one another or to third parties.<sup>35</sup> One respondent stated that a more coherent patent offering in this context would be beneficial. They were in favour of patent pools, which they said can promote market uptake. However, they said multiple pool offerings for the same standard may be damaging for the uptake of technologies and for the consumer. A licensing administrator stated that support from UK legislators for independent licensing platforms would benefit consumers and the SEP ecosystem as a whole.

## Regulatory investigations

- 1.23 An academic stated that the CMA should investigate anti-trust and consumer issues in SEP intensive industries. Another respondent added that the CMA (and other relevant regulators) should have increased powers to investigate licensing practices. They suggested that a strong regulatory regime can act as a deterrent to SEP holders abusing any market power.

## A role for SDOs in SEP licensing

- 1.24 A legal representative stated that SDOs, rather than Governments, may be better placed to deal with SEP licensing issues if provided with regulatory guidance. They added that mechanisms should be introduced at the SDO level to value SEP portfolios.

## Consult consumers

- 1.25 One respondent stated that there is a need to conduct further research on FRAND from a consumer perspective. They added that it would be beneficial to better include consumers in the debate. Further, some respondents stated that UK consumers’ interest should be central to the policy debate.

<sup>35</sup> [https://www.wipo.int/export/sites/www/ip-competition/en/studies/patent\\_pools\\_report.pdf](https://www.wipo.int/export/sites/www/ip-competition/en/studies/patent_pools_report.pdf)

## 2. Competition and market functioning

### Question 3.

In your view, are there issues in respect of market power in markets using SEPs? Examples are particularly sought on practices that create difficulties for industry or act as barriers to innovators.

### Question 4.

Are you aware of evidence of circumstances where an implementer of a SEP is required to buy licences to a wider patent portfolio that is not relevant to the standard or component to which the SEP relates? Are there effective ways of resolving such issues?

### Question 5.

Does the competition law framework impact the provisions in agreements between SEP owners in practice? If so, how does it do this? Is there room for improvement in order to better benefit and encourage competition and innovation?

### Question 6.

In your view, what actions or steps can be taken to encourage competition and innovation in the SEPs ecosystem?

### Summary of themes:

Responses to these questions showed very different views from SEP holders and implementers. Both groups provided evidence in support of their arguments and there were few areas of agreement. The different themes in the responses were:

- **Market power and hold-up.** Differing views on whether SEP holders exercise market power obtained through inclusion of their patents in a standard to charge excessive royalties ('hold-up'), and whether intervention is needed
- **Market power and hold-out.** Differing views on whether implementers engage in strategies to delay agreement of a FRAND license ('hold-out'), and whether intervention is needed
- **Barriers to entry and market exclusion.** Some implementers pointed to difficulty obtaining licenses from SEP holders due to refusal to license at certain points in the value chain, which they claimed has deterred market entry
- **Global licensing of SEPs.** Responses presented differing views on court-ordered global licenses, including the precedent set by *Unwired Planet v Huawei*

- **Requiring licences to a wider patent portfolio that is not relevant to the standard or component to which the SEP relates.** Some responses provided court case evidence of licensed portfolios containing unused, invalid or non-essential patents, and discussed what they saw as harmful effects on competition and innovation
- **Competition law framework.** Differing views on whether competition guidelines provide sufficient clarity on FRAND determination and other SEP-related competition matters, and whether more prescriptive guidance is needed

## Market power and hold-up

- 2.1 Market power is defined by the Organization for Economic Co-operation and Development (OECD) as ‘the ability of a firm (or group of firms) to raise and maintain price above the level that would prevail under competition. The exercise of market power leads to reduced output and loss of economic welfare’<sup>36</sup>. Some responded that there are no issues in respect of market power in markets using SEPs. Respondents pointed to successful market functioning evidenced by rapid increase in adoption of standardised technologies, particularly in the wireless communications sector.<sup>37</sup> Respondents also noted success in other performance indicators, such as time-to-market, access to technology, and technical performance, and suggested these outcomes would not be expected under conditions of market power being exercised.
- 2.2 Some responded that SEP holders are unable to exercise the market power derived from incorporation of their technology within a standard because they commit to license at a FRAND rate. Several responses cited the Huawei v ZTE case<sup>38</sup>, setting a precedent that courts in England and Wales will not grant an injunction unless a SEP holder first offers an implementer a licence on FRAND terms.
- 2.3 As evidence that SEP holders do not charge excessive royalties (‘hold-up’), some respondents pointed to declining royalty rates over time. An academic pointed to a fall in quality-adjusted prices in SEP-intensive device markets, and a consultancy firm pointed to declining aggregate royalties paid for SEP licences by smartphone manufacturers since 2013, remaining in modest single-digit percentages. An industry body compared prices of Apple and Samsung devices with and without cellular functionality, finding that value added from cellular standards exceeded royalties paid. Respondents also pointed more generally to a lack of empirical evidence in support of hold-up. One respondent stated that patent pools have helped to mitigate hold-up, as shown by a reasonable level of marketplace acceptance of patent pool royalty rates by implementers.
- 2.4 On the other hand, most implementers, and some other stakeholders responded that SEP holders exercise market power conferred by inclusion of their patented technology to a standard to engage in so-called ‘hold-up’. This term is used to refer to the practice where a SEP holder demands an excessive licence fee above a fair and reasonable rate. Evidence is provided of court cases where royalties demanded by SEP holders far exceed adjudicated FRAND rates<sup>39</sup> sometimes by more than 200 times<sup>40</sup>. A trade body responded that FRAND terms should be based on the economic value of the patented technology and not the market success of end products, nor the value of inclusion in the standard. A SEP holder and an implementer suggested the development of a specialist tribunal or board to make a public determination on FRAND rates and terms on a case-by-case basis. For further views, see section 5 on licensing of SEPs.

36 OECD Glossary of Statistical Terms <https://stats.oecd.org/glossary/detail.asp?ID=3256>.

37 One respondent provided evidence that global 4G coverage increased to 84% by end of 2020, with global 5G coverage increasing from 5% in 2019 to 17% in 2020.

38 Ibid. No. 13, Huawei v ZTE.

39 Court cases referenced by respondents include Realtek v LSI; Unwired Planet v Huawei; TCL Comm’n Tech Holdings, Telefonaktiebolaget LM Ericsson; Innovatio IP Ventures, LLC Patent Litig; and Microsoft v Motorola.

40 Innovatio IP Ventures, LLC Patent Litig and Microsoft v. Motorola.

- 2.5 Some suggested that the publication of price lists for SEPs or disclosure of comparable FRAND licences in a partially redacted form, could provide potential licensees a basis on which to assess the licensing offer they receive, reducing risk of hold-up. One implementer suggested this could require government guidance encouraging the publication and dissemination of licensing terms by SEP holders. Another suggested this could involve a suitable body publishing upper limits for FRAND rates to allow for benchmarking. Further discussion of transparency is included in section 3.
- 2.6 Many implementers responded that SEP holders use injunction threats to coerce prospective licensees into accepting non-FRAND licensing terms, to avoid removal of their products from the market. One implementer responded that almost half of the 48 UK businesses they surveyed with experience in SEP licensing between November 2021 and February 2022 would accept or likely accept non-FRAND terms to avoid risks of injunctions. Consequently, some responded that the granting of injunctions should be prohibited except in ‘exceptional circumstances’, including where payment of damages is refused, and where an infringer is demonstrably unwilling to enter a FRAND licence. Two implementers responded that SDOs should follow IEEE’s (The Institute of Electrical and Electronics Engineers) lead by updating their IPR policy to clarify that injunctions should only be available in rare circumstances, pointing to evidence that this increased productivity and innovation. For further views on injunctions, see section 4 on patent infringement and remedies.
- 2.7 Implementers gave examples of other actions by SEP holders that they alleged constituted abuse of market power. One implementer responded that a SEP holder had unlawfully seized products at customs to pressure the implementer into accepting an allegedly non-FRAND licence, resulting in millions of pounds worth of losses. It stated that the granting of custom seizures should be prohibited except in exceptional circumstances where damages would not be an adequate remedy.
- 2.8 Others pointed to SEP holders requiring implementers to sign overly restrictive Non-Disclosure Agreements (NDAs). One implementer responded that this reduces price transparency and therefore potential for price competition. Another responded that overly restrictive NDAs prevent potential licensees from checking with suppliers whether patent rights have been exhausted. Exhaustion is defined by the US Supreme Court as occurring when “a patented item’s initial authorized sale terminates all patent rights to that item”<sup>41</sup>. Exhaustion therefore prevents a licensor from repeated future attempts to extract royalties following the sale of a licence, meaning the downstream purchaser of a component is immune to patent claims seeking to extract royalties if the supplier has already taken a licence. Consequently, several responses suggested use of NDAs should be limited. For further views on transparency and NDAs, see section 3 on transparency in the system.

## Market power and hold-out

- 2.9 Some SEP holders and other stakeholders responded that the power to influence prices<sup>42</sup> in SEP licensing negotiations instead lies in favour of implementers, who they claimed engage in so-called ‘hold-out’. This term is used to refer to an implementer that delays agreeing a SEP licence in order to escape payment of royalties or to pressure the SEP holder to agree a lower licence fee than may be fair or reasonable. One licensing administrator responded that hold-out has worsened in recent years, pointing to a study that found the licensing rate in telecoms has fallen from 73% to 39% 2006-2016<sup>43</sup>. Many responded that availability of injunctive relief should remain to allow SEP holders to enforce their rights to mitigate hold-out and recoup innovation costs. Furthermore, some responded that the changes made to US SDO, IEEE’s IPR policy in 2015 to limit injunctive relief should not be replicated by other SDOs, to avoid incentivising hold-out.

41 *Quanta Computer, Inc. v. LG Electronics, Inc.*, 553 U.S., *Bloomer v. McQuewan*, 14 How. 539; *United States v. Univis Lens Co.*, 316 U. S. 241.

42 The terms “bargaining power” and “market power” were both used by respondents to refer to the power to influence prices in a licensing transaction.

43 *Bowman Heiden and Nicolas Petit, Patent “Trespass” and the Royalty Gap: Exploring the Nature and Impact of Patent Holdout*, 34 SANTA CLARA HIGH TECH. L.J. 179 (2018).

- 2.10 Examples of use of hold-out strategies by implementers are given in responses, with one providing reference to court case evidence. These include ignoring communications from SEP holders for months or years without filing a counter-offer<sup>44</sup>, insistence on patent-by-patent, jurisdiction-by-jurisdiction litigation of large SEP portfolios, conditioning payment of SEP licences on SEP holders offering bundles of patents (including patents not bound by the FRAND commitment), and insistence on obtaining unreasonable amounts of information, such as a claim chart for every SEP in a portfolio<sup>45</sup>, among others. One industry body responded that vagueness of the European Commission's notion of a 'willing licensee' may have encouraged a hold-out strategy where companies merely claim to be 'willing' to take a FRAND licence while their behaviour in negotiations suggests otherwise.
- 2.11 Some respondents identified disparity in economic resources between SEP holders and implementers as a cause of unbalanced bargaining power<sup>46</sup> in negotiations. One compared sub-billion operating profits of SEP holders, Nokia and Ericsson, to multi-billion operating profits of implementers, Apple and Samsung, over 2017 to 2020, stating that this should concern policymakers, and that it reflects that SEP holders do not have the upper hand. Others also pointed to significant resources held by digital implementers being channelled into lobbying.
- 2.12 Several SEP holders responded with observations of competition issues between implementers associated with hold-out, including that implementers engaged in hold-out gain an undue competitive advantage over their good-faith licensed competitors, allowing them to unfairly gain market share. Furthermore, one SEP holder said that implementers engaged in hold-out access confidential licensing information of their competitors when enforcement actions are brought, due to the discovery processes used by courts, adding to their competitive advantage.
- 2.13 One legal services firm responded that current access to injunctions is insufficient for SEP holders to be able to enforce their rights, and that a more streamlined, less fragmented, less costly and binding way of resolving disputes should be found. This was seconded by a SEP holder that called for a more accessible and effective system of patent enforcement, following the example set by the UK High Court. Further discussion of these frameworks is included in section 6 on SEP litigation. One licensing administrator responded that it had acted to reduce hold-out risk by offering incentive discount programs for implementers willing to agree a licence within a reasonable time after first implementation of standard-compliant products. It suggested this program could be replicated by other licensors.

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44 Court cases where this behaviour was identified in responses include: *Sisvel v ZTE* (Case No. 30308/20215 R.G.), *Philips v Wiko* (Case No. 6 U 183/16), *Sisvel v Xiaomi* (Case No. C/09/573969/ KG ZA 19-462), and *Sharp v Daimler* (Case No. 7 O 8818/19).

45 See *Sisvel v Haier* (Case No. KZR 36/17).

46 The terms "bargaining power" and "market power" were both used by respondents to refer to the power to influence prices in a licensing transaction.

## Barriers to entry and market exclusion

- 2.14 Several SEP holders responded that the current system of open standardisation is the best way of disseminating standardised technology. One SEP holder responded that open standards ensure “everyone has access” to standardised technology. Section 5 on licensing of SEPs discusses SEP holders’ responses regarding licensing at different points in the value chain<sup>47</sup>, with some responding that to offer licences at all points would introduce unnecessary complexity and administrative burden.
- 2.15 Other responses questioned accessibility. They said that SEP holders were abusing their market power by refusing licences to willing licensees higher in the value chain (e.g. upstream component suppliers), raising competition law concerns. One responded that this is a concern particularly where a SEP holder is vertically integrated, as it can leverage its market power to foreclose competition in the downstream market. Other responses pointed to adverse effects on innovation, and that upstream suppliers are deterred from finding new uses for standardised technology in markets where they cannot obtain licence. One implementer responded that refusing licences to upstream suppliers could delay the adoption of IoT, as whilst component suppliers are unable to obtain licences to indemnify their customers for patent infringement, companies seeking to develop innovative products based on components face uncertainty regarding their exposure to infringement claims. Consequently, many responded that licences to SEPs should be made available to anyone requesting a FRAND licence, irrespective of their position in the value chain. For further views, see section 5 on licensing of SEPs.
- 2.16 One consultancy firm responded that there appear to be agreements between some SEP holders at similar levels in the value chain not to license each other, so that they can then together seek to license at different, higher priced levels in the value chain. They responded that this is a potential competition issue warranting further investigation.

## Global licensing of SEPs

- 2.17 Several responses commented on global licences, referring to the recent case of *Unwired Planet v Huawei*<sup>48</sup>, where the UK Supreme Court’s judgement included for the SEP owner to offer to licence its portfolio of declared SEPs. Some SEP holders responded that global portfolio licensing is the best way to overcome uncertainty over which patents in a portfolio are infringed by an implementer. One industry body responded that, when consensual, licensing patent portfolios can achieve efficiencies of scale. A legal services body responded that a SEP holder will often adjust the royalty rate down for licensees that are unlikely to use the full portfolio, making the practice fairer. Some responded that any issues with portfolio licensing are currently resolved through negotiation between licensee and licensor.
- 2.18 Some responded that under the precedent set by *Unwired Planet v Huawei*<sup>49</sup>, a SEP holder need only prove the merits of a single claim of a UK patent without detailed examination of whether any of the other patents in a global licence are infringed, valid, enforceable or essential. One responded that this may deter some from operating in the UK. Others responded that this could create an issue of forum shopping, defined by one court as “the practice of choosing the most favourable jurisdiction... in which a claim might be heard”<sup>50</sup>. Responses suggested SEP holders may find it most favourable to take their cases to UK courts following the outcome of *Unwired Planet v Huawei*<sup>51</sup>.

47 Ibid. No. 18.

48 Ibid No. 13, *Unwired Planet v Huawei*.

49 Ibid.

50 See *California v. Posey*, 82 P.3d 755, 774 n.12 (Cal. 2004)

51 Ibid. No. 13, *Unwired Planet v Huawei*.

- 2.19 Some suggested essentiality checks be required within all SEP portfolios, alongside legislative action such as reform of the UK Patent Act to remove the precedent of global portfolio licensing set by *Unwired Planet v Huawei*<sup>52</sup>. An industry body suggested SEP holders should be required to provide more detailed information to prove the essentiality of patents in their portfolio. Some responded that implementers should be allowed to make validity, essentiality and infringement challenges without being considered ‘unwilling’ to take a FRAND licence. For further views on global licensing of SEPs, see section 4 on patent infringement and remedies.

### Requiring licences to a wider patent portfolio that is not relevant to the standard or component to which the SEP relates

- 2.20 Most SEP holders responded that they were not aware of evidence of circumstances where an implementer of a SEP is required to buy licences to a wider patent portfolio that is not relevant to the standard or component to which the SEP relates. Were such circumstances to arise, one legal services firm responded that implementers can refuse to enter such a licence, or litigate.
- 2.21 Some used the terms ‘tying’ and ‘bundling’ in their responses. A European Commission discussion paper<sup>53</sup> defines ‘tying’ as occurring “when the sale of a product is conditioned to another transaction. An individual or a company agrees to sell the product only if its purchaser agrees to acquire another product”. It defines bundling as occurring “when a set of several products is sold in one sole ‘package’”. A UK legal services firm responded that only tying is incompatible with competition law, whilst bundling is less problematic as it does not include an element of compulsion. A SEP holder and a licensing administrator responded that non-consensual tying or bundling of SEPs with non-essential patents may amount to a breach of Article 102 of the Treaty on the Functioning of the European Union (TFEU)<sup>54</sup>.
- 2.22 Many implementers and industry bodies responded that licensing of portfolios containing expired patents or valid but unused patents is concerning when it is non-consensual. Two examples were given in relation to mobile connectivity, and another in relation to MPEG video encoding/decoding. Several responses referenced a study that found just 11% of SEPs asserted during the period 2013-2017 were valid and infringed<sup>55</sup>. An industry body suggested SEP holders provide multiple modes of binding licences to improve SEP licensee choices. Another industry body responded that a legislative framework prohibiting requirements to license a wider patent portfolio that isn’t relevant to the standard could resolve these issues.
- 2.23 Several implementers and industry bodies responded that they had observed the licensing of portfolios of SEPs containing non-essential patents. One industry body responded that this practice occurs ‘routinely’, because it proves an impossible task for a potential licensee to assess and litigate every patent in a given portfolio. An industry body gave an example of SEPs reading to different standards (smartphones and smart vehicles) being licensed under the same portfolio, forcing implementers to license patents not essential to their product. Many others responded that over-declaration of SEPs in licensed portfolios unfairly increases royalty rates, as implementers are forced to pay for non-essential patents. Two implementers responded that this detracts from funds available for innovation in end-user products and can be passed onto consumers in the form of higher prices. Several referenced a study that found 50-90% of self-declared SEPs to be non-

<sup>52</sup> Ibid.

<sup>53</sup> See [https://ec.europa.eu/competition/antitrust/art82/024\\_en.pdf](https://ec.europa.eu/competition/antitrust/art82/024_en.pdf). “DG Competition discussion paper on the application of Article 82 of the Treaty to exclusionary abuses – A Comment”.

<sup>54</sup> Article 102 TFEU, “abuse may, in particular, consist in... making the conclusion of contracts subject to acceptance by the other parties of supplementary obligations which, by their nature or according to commercial usage, have no connection with the subject of such contracts”. See <https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:12008E102>.

<sup>55</sup> Matthew G. Rose, & Emily Lukan, “Between a Rock and a Hard Place”: *Unwired Planet v. Huawei* and the Dangerous Implications of Worldwide FRAND Licenses, E-COMPETITIONS, NO. 84684 (Aug. 2017).

essential, based on court case evidence<sup>56</sup>. One responded that bundling and tying strategies are used by SEP holders to mask and inflate the independent value of a their individual SEPs, supporting a higher royalty demand that is unreasonable.

- 2.24 One responded that legislation should prohibit alleged bundling and tying strategies, which they defined as including (i) requiring portfolio or sub-portfolio licences; (ii) requiring combined licences of SEPs and non-essential patents; (iii) requiring customers to license SEPs and/or other patents as a condition to purchasing products or services in which the licensor has market power or a monopoly, and (iv) requiring the purchase of its products or services as a condition to obtaining a licence to some or all of its SEPs.

## Competition Law Framework

- 2.25 An industry body responded that the Horizontal Guidelines<sup>57</sup> are correct in guiding that when participation in standard development is open and the process transparent, standardisation agreements usually will not restrict competition. A SEP holder responded that additional guidance on bilateral licensing is unnecessary given the clear framework provided by *Huawei v ZTE*<sup>58</sup>, and given bilateral licensing is not a cooperation agreement. Some responded that flexibility should be maintained in guidance, as more prescriptive guidance on FRAND could encourage potential licensees to assert compliance failures by SEP owners as a reason to delay negotiations of FRAND licences. These responses do not call for any changes to be made to the Horizontal Guidelines or any other aspect of the competition law framework.
- 2.26 On the other hand, five implementers and one industry body responded that the Horizontal Guidelines lack clarity on SEPs licensing matters. Some responded that little guidance is given on what the FRAND commitment entails and how parties should arrive at FRAND terms, with ambiguities leading to excessive royalties being charged by SEP holders, refusals to license, and more licensing disputes. These responses urged a revising of the guidelines to offer more legal certainty. Several responses pointed to success of the 2015 IEEE policy update in providing clarity on the availability of injunctive relief for IEEE standards and setting out the recommended principles for valuation.

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<sup>56</sup> European Commission, "Competition policy brief – Standard-essential patents", June 2014.

<sup>57</sup> *Ibid.* No. 30.

<sup>58</sup> *Ibid.* No. 17, *Huawei v ZTE*.

## 3. Transparency in the system

### Question 7.

Is there sufficient transparency around how patents are being declared as essential to the standard? What actions do industry, including SDOs undertake to ensure essentiality is understood?

### Question 8.

Are you aware of instances of under-declaration or over-declaration and what issues does this create for markets using SEPs?

### Summary of themes:

Both SEP holders and implementers related the issue of over-declaration and under-declaration to SDO policies. However, responses from SEP holders and implementers tended to differ on the extent to which they saw over-declaration as a problem. Relatively few respondents commented on under-declaration. The main themes were:

- **Transparency of the declaration process.** Some said there was sufficient transparency within SDOs or that the negotiation process provided transparency. Others said that there was not sufficient transparency and that this was a particular problem for SMEs
- **Proposals to improve transparency and understanding of declaration.** Examples included education programmes and changes to SDO IPR policies and responsibilities
- **Relationship between declarations and SDO rules.** Various respondents said that so called over-declaration or under-declaration are consequences of SDO IPR policies
- **Over-declaration.** Many respondents said there were high levels of over-declaration. There were differing views on the extent to which over-declaration is a problem
- **Under-declaration.** Some respondents said under-declaration is no longer a problem, while others said it can be a cause for concern

### Whether there is sufficient transparency of the declaration process itself.

- 3.1 Several respondents stated that the declaration process itself is sufficiently transparent and well understood. Some said that there is sufficient transparency within a few SDOs such as ETSI and the current declaration requirements are sufficient to ensure that the standard can be implemented at a reasonable cost without it being blocked by a patent owner. Some respondents said that there are already sufficient resources that provide information on how declaration works. One respondent argued that SDOs offer educational materials on standards, including essentiality.
- 3.2 In addition, two respondents stated that the current ETSI database is generally recognised as being of superior quality compared to those of other SDOs. One respondent suggested that ETSI's process of declarations, where specific patents and paragraphs of relevant standards are identified, assists transparency, and could be followed by other SDOs.
- 3.3 One respondent argued that the challenge in ensuring that essentiality is understood by providing a list of “checked” SEPs would go beyond the scope of SDOs and that there is already a market that provides for landscaping studies and essentiality checks. Another respondent stated that to require SDOs to be responsible for determining essentiality would be disruptive to their fundamental purpose of developing standards. One said that a number of factors present limitations to perfect transparency such as costs and the constantly evolving nature of the standard.
- 3.4 Some respondents said sufficient transparency was provided through the negotiation process. One respondent said that because of the way in which negotiations between implementers and SEP owners tend to proceed in telecoms, i.e., by reference to claim charts produced for the purposes of technical discussions on essentiality, they do not consider that any lack of transparency on the basis for a declaration of essentiality will give rise to meaningful difficulties in licensing discussions. A respondent referred to *Huawei v. ZTE*<sup>59</sup> and stated that both parties are required to place sufficient information before the other to conduct an arms' length negotiation.
- 3.5 On the other hand, many respondents, stated that there is a lack of transparency, and the process is opaque, particularly for SMEs. One respondent stated that improved transparency is desirable if additional information is sufficiently accurate and unbiased. In addition, another respondent said that declaration requirements through SDO policies are not adequate to foster transparency in the system. One respondent stated that SDO's try to mitigate the lack of transparency through their IPR policies. However, this is not consistently applied or sufficient.
- 3.6 Some responses also touched on issues relating to the independence or impartiality of the process of self-declaration which are further discussed below under the heading on who should carry out essentiality checks.

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<sup>59</sup> Ibid. No. 17, *Huawei v ZTE*.

## Proposals to improve transparency and understanding of declaration

- 3.7 Several responses included proposals for how transparency or understanding of the declaration process could be improved, either by changes to the IPR policies or responsibilities of SDOs, or by government action.
- 3.8 Some respondents argued that transparency could be improved by updating IPR policies or otherwise imposing requirements for more specific declarations. Some respondents said that SEP holders should be required to confirm what they claim the relevant SEP covers, for example referencing the portion of the standard or contribution to which the disclosure relates to. One respondent said that SDOs should have to approve such a declaration. Another stated that SEP holders should have to produce an independent essentiality claim chart which could be made publicly available at the SDO. One respondent argued that SEP owners should be required to update their declaration where a court has determined that the patent in question is invalid or not truly essential to the standard. Another respondent suggested that SDOs could provide clarity through further definition of what is meant by “SEP” in a specific context, for example whether it includes technically essential patents or only those which are commercially essential.
- 3.9 Some respondents argued for broader changes to SDO responsibilities. One respondent recommended that SDOs could strengthen their guidelines for SEP declarations, including providing SEP certification services and introducing third-party agencies to ensure the reliability and transparency of SEP declarations. Another respondent recommended that SDOs could establish a ‘board of experts’ having specific expertise in the relevant field which may help potential licensees obtain information on essentiality.
- 3.10 Some respondents said government could increase transparency through endorsement and education. One respondent stated that there is information available which would benefit from being supported and endorsed by the UK Government, such as that provided by the LOT Network<sup>60</sup>. Another respondent stated that transparency could be improved if the IPO, as well as SDOs provided more information, education and guidance about standardisation of SEPs and best practices for licensing aimed at sectors who are interested in implementing connectivity standards. One respondent stated that the UK Government should take more steps to participate in SDOs and ensure participants are penalised if they fail to comply with the IPR policy.

## The relationship between declarations and SDO IPR policies

- 3.11 Several respondents related the issue of transparency to the objectives of IPR policies. They responded that the aim of IPR policies such as those of ETSI was not to establish essentiality or inform the licensing process. Rather it was to ensure at an early stage that licences will be available for the standard on FRAND terms in order to facilitate the process of standard development.
- 3.12 Some responded that so called “over-declaration” or “under-declaration” are logical consequences of SDO IPR policies. Some respondents said that there is an initial over-declaration due to e.g., the ETSI IPR policy obligation to declare potentially essential patents and applications. One respondent said that under the IEEE, the often-used “blanket declaration” means a de-facto under-declaration.
- 3.13 Some respondents drew attention to the purpose of the declaration system in relation to over-declaration. One said the purpose of the declaration framework is to facilitate the development of the standard, not the licensing of patents. Two respondents further said the purpose of a declaration to an SDO is so that the SDO can be confident that the technical standard developed within it can be implemented in the market. These responded variously that there is a tendency to mischaracterise the purpose of the declaration system or that over-declaration can only really occur in SDOs that impose a more detailed disclosure requirement on their members.

<sup>60</sup> Lot network, ‘Prevent unwanted litigation while preserving the use of your patents’ (LOTNETWORK, 2020) <https://lotnet.com/>

3.14 One respondent said that the ETSI patents database, by its nature, is subject to significant over-declaration. They said that this is not a fault but a safeguard to ensure that all SEPs are available to license under FRAND conditions. Three respondents said that over disclosure is inherent in the rules of most SDOs. However, one respondent said this is understood in the industry and accounted for. Problems only arise where patent owners seek to influence licensing discussions by artificially inflating the apparent size of their portfolio through over-disclosure. Another said over-declaration becomes a problem when companies assert patents as SEPs on basis of those declarations.

## Over-declaration

- 3.15 Some respondents commented that over-declaration is not an issue and should not be a cause for concern. One respondent argued this is because the goal of linking disclosure with licensing declarations is to ensure access to the patents essential to a standard under FRAND terms. One respondent stated the term “over-declaration” is widely misused, and it is not aware of instances of over-declaration. A few respondents said that those contributing technology to a standard are doing what is requested of them i.e., declaring patents that may become essential to a standard. Another respondent said that existing approaches for disclosure of SEPs and providing licensing commitments have been successful. Another respondent said that though some SDO policies encourage over-declaration, this is more useful than SDOs that have no or little mandatory declaration requirements.
- 3.16 However, several respondents reported there were high levels of over-declaration with some providing figures or pointing to studies in support of this. One respondent said an estimated 75% of declared essential patents are not essential to the standard. A few respondents referred to studies analysing over-declaration. These respondents said the studies indicate the rates of declared patents actually being essential are 10-50%<sup>61</sup>, 20-30%<sup>62</sup>, and 42%<sup>63</sup>. One of these respondents also pointed to another study saying this found 8% of declared patents in 5G were found to be essential<sup>64</sup>. Another respondent pointed to a study reporting 50-80% of declared patents being found to be non-essential<sup>65</sup>.
- 3.17 One respondent said there is clear evidence that participants in the standards development process at ETSI engage in significant over-declaration. This respondent pointed to the European Commission in a Call for Evidence that said “according to some experts, only about 25-40% of all declared SEPs are truly for a given standard”<sup>66</sup>. Another respondent stated that generally, over-declaration is more common in 4G/5G patents declared at ETSI. A respondent said companies that have business models where revenues are dependent on patent licensing are incentivised to over-declare.

61 Régibeau and others, Transparency, Predictability, and Efficiency of SSO-based Standardization and SEP Licensing A Report for the European Commission (2016) 62.

62 Bekkers, Patents and Standards A modern framework for IPR-based standardization (2014).

63 Lemley and Simcoe, ‘How essential are standard-essential patents?’ [2019] 104(607) Lemley and Simcoe, ‘HOW ESSENTIAL ARE STANDARD-ESSENTIAL PATENTS?’ [2019] 104(607) HOW ESSENTIAL ARE STANDARD-ESSENTIAL PATENTS?)

64 Robert Stoll, ‘5G SEP leadership in 2021’ (5G SEP leadership in 2021, 2021) [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=3935263](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3935263); Stoll, Robert, 5G SEP leadership in 2021 (October 3, 2021). Available at SSRN: <https://ssrn.com/abstract=3935263> or <http://dx.doi.org/10.2139/ssrn.3935263>

65 Rose & Luken, ‘Communication from the Commission to the European Parliament, The Council and the European Economic and Social Committee’ (Setting out the EU approach to Standard Essential Patents, 2017) <https://ec.europa.eu/docsroom/documents/26583/attachments/1/translations/en/renditions/native>

66 European Commission, ‘Intellectual property – new framework for standard-essential patents’ (Intellectual property – new framework for standard-essential patents, 2022) [https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/13109-Intellectual-property-new-framework-for-standard-essential-patents\\_en](https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/13109-Intellectual-property-new-framework-for-standard-essential-patents_en)

- 3.18 Respondents raised several concerns about the effects of over-declaration. One respondent said over-declaration creates uncertainty as to the number of SEP licences that are required, reduces efficiency and accuracy of patent valuation methods based on patent counting, and increases the cost and time needed to establish standard essentiality of a patent portfolio. A few respondents said over-declaration could distort the market and prevent fair pricing of those patents which are truly essential. They suggested this risked impairing the take up of technology. Another respondent said that over-declaration creates hurdles to adoption and creates significant information asymmetry between the licensor and the licensee, affecting the licensee's ability to negotiate. One respondent argued that over-declaration can have the effect of reallocating royalties to non-essential patents, which are not required to be licensed. Others said that over-declaration reduces the credibility of standardisation.
- 3.19 Several respondents said that challenging over-declared SEPs leads to significant litigation costs which are not feasible for smaller companies, and which create barriers to market entry. They argued these challenges further decrease transparency and create uncertainty in the SEPs framework. One respondent said over-declaration results in implementers using a lot of resources to analyse essentiality. The respondent said over-declaration may result in lengthy negotiations between the licensor and potential licensee and may lead to court proceedings.
- 3.20 One implementer said there should be no presumption that just because a patent has been declared essential, that it is in fact essential or that it has been subject to any good faith evaluation. Another respondent said over-declaration is a problem when the 'top down' method is used to determine FRAND rates as the total number of essential patents used in this method is based on self-declarations. However, this respondent noted that in patent pools the SEPs that are part of the pools have had essentiality determined by an expert.

## Under-declaration

- 3.21 Several respondents stated that under-declaration concerns have reduced since the Rambus case<sup>67</sup> in the US and EU. In the *Rambus case*, the patent holder participated in standard setting whilst being aware of patents essential to the standard but did not declare these patents. The patent holder later asserted those patents against users of the standard. Two respondents said they were not aware of any under-declaration taking place. One of these respondents, however, said late declaration is a problem, but one that should be dealt with by anti-patent ambush<sup>68</sup> actions.
- 3.22 On the other hand, one respondent said under-declaration would leave implementers unsure whether they would have access to standardised technology on FRAND terms and suggested that it would be advisable to continue to allow and even promote over-declaration. The respondent said under-declaration would lead to less certainty as to the potentially essential patents that exist and uncertainty as to the terms under which under-declared patents will be licensed, if at all. One respondent argued that under-declaration can lead to 'patent ambush' and could mean that the patents are not covered by FRAND. The respondent noted that under-declaration could become problematic if it led to the adoption of the standard without a FRAND declaration for such patent. One respondent said that under-declaration is more concerning than over-declaration.

67 Federal Trade Commission, 'In the Matter of Rambus Incorporated' (Rambus Inc, In the Matter of, May 14, 2009) <https://www.ftc.gov/legal-library/browse/cases-proceedings/011-0017-rambus-inc-matter>

68 'Patent ambush' refers to a situation where a member of the SDO has a pending patent, or intends to file a patent, which is relevant to the standard, but does not disclose this and subsequently asserts that a patent is infringed by use of the standard as adopted.

**Question 9.**

**Would the introduction of an essentiality check service by an independent party improve licensing negotiations? Who would be the appropriate independent party to undertake essentiality checks?**

**Question 10.**

**How should an essentiality check take place? Should there be a level of legal certainty given to essentiality checks and assertions of essentiality by IPR holders? If so, how?**

**Summary of themes:**

While most respondents thought the independence of those carrying out essentiality check was important, there were differing views on whether an additional independent essentiality checking service needed to be provided. And many responses said legal certainty could only be provided by the courts. The main themes were:

- **Essentiality checks by an independent body.** Differing views on whether changes to provide independent essentiality checking would improve negotiations
- **Who should carry essentiality checks.** Many respondents thought that independence was important but there were differing views on who should carry out the checks including such as SDOs or public bodies
- **Limitations on independent third-party essentiality checks.** Respondent commented on the scope of essentiality checks and the limitations. Differing views on whether the check would be feasible
- **Legal certainty on essentiality checks.** Many responses said legal certainty could only be provided by the courts

**The introduction of essentiality checks by an independent party is not necessary**

- 3.23 Two respondents said that an independent third-party would not be the most suitable person to carry out essentiality checks. Rather, the most appropriate person would be the parties to a negotiation who are most familiar with the patents. Some respondents referred to the Hantei service offered by the Japanese Patent Office and noted that this has rarely been used. A respondent argued that parties in negotiations should be entitled to use checks which they feel will be helpful in negotiations. The respondent noted that currently parties use various third-party published studies and commission assessments, specifically themselves.
- 3.24 One respondent said that there is already a vast amount of information about SEP essentiality available to the public through commercial SEPs mapping and landscaping services. The response questioned whether there is a real need for more transparency and said that it is not clear who would benefit from an essentiality check. Another respondent said that closer scrutiny of patent validity should be prioritised as a first step, rather than the introduction of an essentiality check service. The respondent added that they strongly opposed legislators and regulatory bodies introducing a system of resolving disputes around SEPs by solely weakening the negotiating position of technology adopters.

- 3.25 Several respondents stated that third-party essentiality assessments can be helpful if carefully structured to be truly independent and avoid bias. However, recommended that current industry-driven efforts should be allowed to play out, so that the benefits, challenges, and potential of essentiality assessments can be learned before the UK government decides on a major course of action.
- 3.26 Many respondents stated that patent licensing platforms already provide a solution and includes methods to adequately distribute royalties among the participating licensors. This is discussed further under the section on patent pools for essentiality checks below. A respondent said that the UK already has two essentiality services (the UK courts and the IPO's Opinion Service).

### **Limitations and disadvantages of independent third-party essentiality checks**

- 3.27 Some responses drew attention to the limitations or disadvantages of essentiality checks in general. Some said an essentiality check service would only be an indication of essentiality, since the final determination must be made by a court with the powers to do such a determination. Another said that a disadvantage of essentiality checks is that they are not legally binding unless confirmed by courts. One respondent stated that an essentiality review concept presents significant practical and fairness issues.
- 3.28 Several respondents gave their views on the costs that would be associated with checks. One said an independent service reviewing every patent would be a waste of resources. A further three respondents stated that an independent service would be slow and expensive. Another said that if costs were borne by the SEP holder this could disincentivise participation by small firms in the standardisation process or result in reduced research. However if borne by the licensees (directly or indirectly in the form of higher royalties) this could be more costly than simply accepting the licence with less information. Another respondent noted they were unclear on the cost of such service and the benefit it would bring.
- 3.29 Some respondents had more specific concerns about the idea of independent third-party checks. One respondent said that an independent review of the essentiality of patents by itself is not enough to address concerns as the results of the check can be as readily ignored by an implementer as a self-certification from the SEP owner. Another respondent stated that the third-party essentiality checks could be used by potential licensees to demand a patent-by-patent review and a refusal to accept a portfolio license. One respondent stated that an independent service would not improve licensing if 'independence' is taken as the sole eligibility criterion for third party essentiality checks. One respondent said an independent verification could be helpful, however, it could also create issues if the results were wrong.

### Potential benefits of introducing independent third-party essentiality checks

- 3.30 On the other hand, many respondents stated that a properly resourced independent body should carry out essentiality checks. The IPO or certified law firms were given as examples. Many said there should be a neutral third-party independent body.
- 3.31 One respondent stated that the introduction of an essentiality check service could, under certain circumstances, improve licensing negotiations. However, this will be subject to certain factors e.g., the technical feasibility, institutional feasibility, procedural aspects and policy considerations. A respondent said an independent service would be most effective in improving transparency for standards where there is little or no information that exists. In this respect, an independent service would be more helpful for smaller companies.

### Who should carry out essentiality checks?

- 3.32 Several respondents commented on the qualities of those who should carry out checks. Three respondents stated that the essentiality checks should be undertaken by qualified assessors. Other respondents said that it was important for reviewers to be independent, neutral or knowledgeable, and free from bias introduced by the funding of the process. Another respondent recommended that such checks should be ex-parte without involvement of parties.
- 3.33 One respondent said that patent offices are not in a position to conduct such checks despite the fact patent offices are trained and competent in conducting validity checks. The respondent noted that these are different to essentiality checks.
- 3.34 However, several respondents saw a role for governments or patent offices. One respondent pointed to the conclusion reached in the JRC (Joint Research Centre) Pilot Study for Essentiality Assessment of Standard Essential Patents<sup>69</sup> that the European Patent Office (EPO) should consider playing an active role in carrying out essentiality assessments. One respondent said the IPO should amend the Manual of Patent Practice to include sections on SEPs. In addition, the Department for Business should coordinate the annual publication of SEP rulings and policies. A respondent stated that UK legislation should set out the nature of an essentiality check and set specific requirements for the checks to meet. This should then be followed by regulators carrying out regular audits and ongoing reviews of policy to ensure that their criteria meet the legal standard set. One respondent stated that the British Standards Institute (BSI) should set up a database of SEPs in the UK.
- 3.35 One respondent stated that SDOs could be involved in essentiality checking. For example, the SDO could engage an independent group of expert engineers to check essentiality before a patent family can enter the pool.

<sup>69</sup> Publications office of the European Union, 'Pilot study for essentiality assessment of Standard Essential Patents' (JRC Publications Repository, 2020) <https://publications.jrc.ec.europa.eu/repository/handle/JRC119894>

## Patent pools for essentiality checks

- 3.36 Several respondents, including some licensing administrators, pointed out that patent pools conduct an essentiality determination. One respondent pointed to the way essentiality checks are carried out by patent pools as a good example. The respondent added that the same criteria is used for evaluation of all the patents and the process allows the licensor to submit comments, substitute patents from the same family and conduct technical discussions with the evaluator.
- 3.37 Another respondent said that most patent pools hire third party assessors for essentiality and these assessors carry out a fair evaluation to a reasonable degree. They were doubtful whether any governmental body work would yield better evaluation to secure further credibility. Other responses noted that the assessors carrying out essentiality checks are patent lawyers who are expert in both the technology and the patent laws of the issuing jurisdiction and are independent. A respondent noted that patent pools are required to mandatorily undertake such checks to invoke the safe harbour provisions and claim exemption from Article 101 of the TFEU.
- 3.38 However, a respondent stated that patent pool determinations are often confidential and not publicly available. This creates opacity as there is no disclosure on how a conclusion was reached for validity. Another respondent added that not all licensees respect the patent pools results on the checks.

## Requirements for essentiality checks and other obligations

- 3.39 Three respondents said that any essentiality check system should be voluntary. Another respondent added that an essentiality check is only as good as the time resource allowed and the person making it. To that effect, any statutory scheme would need to meet high standards and would need to include scope for an appeal. It would also need to be voluntary to ensure that the basic legal principles are not breached. Two respondents said that any essential service cannot be a substitute for judicial proceedings or that the option for judicial determination must be open.

## Legal certainty for essentiality checks

- 3.40 One respondent stated that the existing level of legal certainty provided by essentiality checks depends on the value of the standard. Higher value standards are given a higher degree of certainty by the organisation through studying the standard. However, lower value standards are deemed by commercial providers not to be economically worthwhile to study, thus making it unlikely to be economically worthwhile to provide a high degree of certainty.
- 3.41 However, many respondents argued that a legally binding decision on essentiality or non-essentiality can only be made by courts. Some respondents also argued that improved essentiality checks which do not have the binding characteristics of court decisions will not improve licensing negotiations or provide legal certainty. A respondent added essentiality checks should not carry with it any legal certainty in case the parties later resort to litigation. One respondent stated that an essentiality assessment should not relieve a patent holder from its obligation to prove that an alleged SEP is essential and infringed under traditional patent law principles and burdens of proof. Another respondent said that the burden of proof should be put on the party that disagrees with the assessment during litigation proceedings of patent infringement.

- 3.42 One respondent stated that it is impractical to determine essentiality with legal certainty for more than a very small proportion of patents and it is impossible to make reasonably accurate assessments for all declared-essential patents. Another respondent stated that the determination of a higher legal certainty would require each and every patent in a SEP portfolio to be successfully asserted which would be unrealistic, unproductive and impractical.
- 3.43 One respondent proposed that legal certainty could be improved. They said that a layer of legal uncertainty can be removed through legal review of the essentiality by judges who are active with SEPs litigation.

### Transparency of essentiality checks

- 3.44 Some responses discussed publication of the outcome of essentiality checks. A respondent said that the most effective third-party essentiality assessment system would be a simple “decision-only” in which the assessor publishes a simple conclusion whether the patent is found essential. On the other hand, two respondents said that essentiality claim charts should be made public, with claim construction analysis set out by the SEP holder. Several respondents said that essentiality checks should be made publicly available. A respondent said that this would enable third parties to have visibility on the quality and matter of the assessment. Another respondent added that for better transparency, it is crucial for any resulting essentiality determinations to be publicly available.

### Methodology

- 3.45 Several responses proposed approaches for dealing with large volumes of potentially essential patents. Some respondents said that sampling should be considered for larger portfolios and rely on sound, transparent and statistical principles. One respondent recommended that if a limited essentiality review is conducted, the selection of patents should occur on a random basis, to avoid a patent holder selecting the ‘best’ patent and seeking to extrapolate the results of that verification to the wider patent portfolio. Two respondents said that the scope of essentiality checks should be clear, e.g., any findings of essentiality with respect to one patent should not imply that this applies to the broader portfolio. One respondent said that any obligation on SEP owners to follow a certain process should be mirrored by licensees, i.e., to take a licence on FRAND terms.
- 3.46 Some respondents commented on the stage at which the checks should be carried out. One respondent commented that SDO policies could put in place early disclosure of alleged essential patents to overcome some of the issues and provide greater certainty for technology adopters. Another respondent stated that there can be mandatory checking of essentiality checks upon certain trigger events such as finalisation and update of the relevant standard.

### Cost burden

- 3.47 Some respondents discussed who should bear the costs of essentiality checks or suggested how they could be minimised. One respondent said that essentiality checks should not add to the burden of SMEs that do not have the resources to spot or challenge poor checks. Another respondent said that the SEP holder should pay for the essentiality check and those costs should not be too onerous. The respondent pointed out that at present, litigation is the only way to challenge essentiality of self-declared SEPs which is expensive. Another respondent stated that essentiality checks could be carried out through a certain percentage of sampling which the SEP holder pays for. Two respondents said that any third-party independent institutions should remain non-profit.

**Question 11.**

**As SEP portfolios are negotiated with individual implementers, in your view is there sufficient transparency around pricing available when entering into negotiation? Is there a justification under FRAND for different SEP implementers, using the SEP for the same purpose, to be charged different rates for market access?**

**Question 12.**

**Would some form of pricing transparency be appropriate for supporting implementers in FRAND pricing negotiations?**

**Summary of themes:**

Responses discussed views on the transparency of pricing, proposals for improvements and different rates for similarly situated SEPs. The main themes were:

- **Transparency of pricing.** SEP holders tended to think that there was sufficient transparency of pricing in the main, while implementers did not. Responses discussed the use of NDAs
- **Proposals to improve pricing transparency.** Proposals included provision of resources for licensee, publication of rates or agreements, and guidance
- **Different rate for similarly situated SEPs.** Many responses discussed the Unwired Planet case, either to show different rates were justified, or to criticise the decision

**Transparency of pricing**

- 3.48 Several SEP holders and others said that there is generally sufficient transparency of pricing with respect to the most widely adopted standardised technologies. One respondent stated that transparency around pricing depends on the maturity of a standard and that over time, royalty rates become known publicly. One respondent suggested that licensing of cellular standards was a good example of transparency. Another respondent argued that pricing transparency at an early stage is impossible as the market does not attach a value to the technology. Several respondents said that patent pools provided price transparency because they have transparent pricing and terms which are published on their websites.
- 3.49 One respondent stated that the use of NDAs or confidentiality clauses are appropriate as parties discuss commercially sensitive information. The respondent also added that licensees can request unreasonable amounts of confidential information to delay negotiations. Some respondents said that licensees, as much as SEP holders, want or insist on confidentiality provisions for commercially sensitive information. A SEP holder said that to overcome some of the transparency issues, the respondent added that they have provided to prospective licensees anonymised information about prior licence agreements.
- 3.50 However, many respondents said there was a lack of transparency due to the use of NDAs or confidentiality clauses. Some respondents said that SEP holders require potential licensees to enter into restrictive NDAs or other agreements to access basic information necessary to facilitate FRAND licensing. Some respondents argued that the confidentiality clause of the licensing agreement creates scepticism on the part of the licensee on whether the rate offered is the best offer. Another respondent suggested that there is no

reason why SEP licensing contracts should be kept confidential. One respondent argued that SEP holders should not be able to resist disclosure of rates to maximise revenue as this would go against the “non-discriminatory” element of FRAND.

- 3.51 One respondent added that transparency over FRAND terms was particularly important for royalty bearing SEPs to allow the market to assess whether to adopt the standard. Another respondent argued that issues of transparency are particularly acute for potential licensees new to telecoms. They said that many licensees have no experience with telecoms and often come with the assumption that off-the-shelf modules are paid up products with all the necessary licences in place.

### Proposals to improve transparency of pricing and other terms

- 3.52 Some responses suggested resources that could be made available for licensees who have less experience. One respondent suggested the IPO and other organisations could help educate implementers on how to approach information on pricing transparency. This respondent also suggested SEP holders could be encouraged to provide information on their licensing programmes, where they deem it appropriate and helpful to do so. Another respondent said high quality, neutral and reliable information would provide value to SMEs and new IoT entrants on standardisation and licensing procedures. The respondent suggested these resources could be provided by the IPO or UK policymakers to improve transparency in the ecosystem.
- 3.53 One respondent stated that there could be more transparency concerning both licence rates and who is licensed, as long as confidentiality of commercially sensitive information is properly observed. Another respondent stated that SEP holders should disclose non-confidential information such as a listing of the patents proposed to be licensed and details of the basis and methodology upon which the FRAND offer (including any royalty rate) has been calculated.
- 3.54 A number of respondents proposed there should be greater availability of comparable licences. This would enable a potential licensee to check whether the rate in the comparable licence accurately reflects the effective royalty rate and the value of the patented invention. One respondent said licensors should not be prevented from disclosing licence terms and royalty rates that allow the evaluation of comparable licences, and that licences can be redacted to remove any particularly sensitive confidential information.
- 3.55 Several respondents argued licensing rates or agreements should be made public to improve pricing transparency. One respondent stated that pricing should be made public at the time of the adoption of the standard. Another respondent stated that offers should be publicly made available as early as possible. Another respondent commented that SEP owners should disclose their rates like patent pools, and global FRAND case judgments should be made public including royalty rates. One respondent said incentives should be introduced for sharing pricing information about existing licences so that SEP holders and courts can take non-discrimination seriously.
- 3.56 Some responses proposed there should be guidelines on pricing. One respondent said they would welcome guidance on pricing transparency that is in line with competition rules which could be included in the Horizontal Guidelines<sup>70</sup>. Another respondent stated that transparency of pricing guidelines would be beneficial.
- 3.57 One respondent said that licensing rates could be disclosed to a suitable body such as the relevant SDO, the IPO, a competition law authority, or a body like the copyrights tribunal. This respondent suggested the body could then publish information about licensing rates or be involved in setting licensing rates. Another

<sup>70</sup> Ibid. No. 30.

respondent suggested that for dispute resolution mechanisms, there should be an early stage where the tribunal orders the parties to disclose to the tribunal and the other party's legal representatives the contents of comparable licence agreements.

- 3.58 One respondent said that improving the transparency over the number of truly essential SEPs can improve the efficiency of price negotiations between the two parties.

### Different rates for similarly situated SEPs

- 3.59 Some respondents argued that FRAND commitments do not imply that all licensees will pay the same royalty but rather, should reflect the value that the patented standardised technology creates for the end-user product which may vary for different licensees. Another respondent suggested that rates vary due to various circumstances which include looking at the licensee's sales profile, position in the market and product plans. Others said that rates could differ due to other factors such as cross-licensing agreements and that royalties could be paid as lump sums.
- 3.60 Two respondents argued that the Supreme Court in *Unwired Planet*<sup>71</sup> held that the non-discrimination in the FRAND context does not mean that every licensee is entitled to the same rate, even similarly situated competitors. One respondent said that there were both potential competition law and contract law justifications for different implementers using the SEPs for the same purposes to be charged different rates for market access.
- 3.61 Some responses stated that differences in pricing is not an issue as long as it is justified. A respondent said that it is assumed SEP holders should be able to justify offering different licensing terms to licensees who use the SEP for the same purpose as long as they have a genuine commercial reason. Another respondent stated that there may be justifications as to why different implementers may be charged different rates despite the fact that the SEP is being used for the same purpose. The respondent argued that these justifications need to be based on objective grounds and stated the broader concern around discrimination is that potential licensees that are similarly situated get charged different rates.
- 3.62 On the other hand, some respondents argued that there is no justification under FRAND principles for different pricing. One respondent stated the purpose of the FRAND commitment, and for the creation of the standard, is to ensure that the standard is available to all companies at the same price, in order to enhance and grow the market. This respondent said that SEP licences should not be based on the price of the end product as all companies were using the same standardised technology covered by the SEP. They argued that there was in fact discrimination between small and large companies.
- 3.63 One respondent argued that offering different rates to different competitors for access to the same market is discriminatory and in breach of competition law. Another respondent referred to *Unwired Planet*<sup>72</sup> and argued that the case permits a type of discrimination in the UK, i.e., charging similar rates only to comparable undertakings, which otherwise would be considered a distortion of competition. Another respondent argued that information asymmetry is exploited by SEP holders to their advantage as they possess information which the potential licensee does not have.
- 3.64 On the other hand, some responses stated that offering different rates under FRAND is not justified and SEP holders have an unfair advantage in pricing negotiations. Some respondents argued that there is no justification under FRAND principles for different pricing. Furthermore, one respondent argued that information asymmetry is exploited by SEP holders to their advantage as they possess information which the potential licensee does not have.

<sup>71</sup> Ibid. No. 13, *Unwired Planet v Huawei*.

<sup>72</sup> Ibid.

## 4. Patent infringement and remedies

### Question 13.

Views are sought from respondents on the role that the patent system plays in the development of SEPs and FRAND licensing and whether there are issues within current practice (including law and court judgments) that create issues for innovators. Please include case studies or worked examples, if possible.

#### Summary of themes:

Respondents reported a variety of issues that affect parties that interact with the SEP ecosystem. Most of the responses highlighted issues for SEP holders or implementers. The main themes were:

- **The benefits of the patent system in incentivising innovation.** Respondents said the patent system incentivises contribution to a standard and promotes competition
- **Issues for innovators in current SEP licensing practice.** A number of issues were highlighted. While some said the UK system works well, some also said there were high levels of litigation around SEPs

#### The benefits of the patent system in incentivising innovation

- 4.1 Respondents were asked about the role of the patent system in the SEPs landscape. Most SEP holders and some others said the patent system is important to the development of standards as it incentivises contribution to a standard by providing a financial reward if the technology is adopted into the standard, this also promotes competition between different parties. Some of these respondents commented that without the patent system participation in standardisation would be limited. Some respondents also commented that SEPs allow smaller innovators to compete and have their technology solutions judged on merit alongside large companies.
- 4.2 Two SEP holders commented that the current UK patent system and approach to SEP licensing generally works well and should continue to be followed. Some respondents said the current SEP framework generally balances the interests of the SEP holders and implementers. Some respondents commented that the quality of patents is important in providing confidence in the SEPs being licensed. One respondent stated a harmonised patent system is required for effective global enforcement of SEPs. Another respondent suggested the patent system could play a greater role in the development of SEPs by requiring patent holders to disclose all discussions within the standardisation process that may be relevant to the validity and essentiality of the patent.

## Issues for innovators created by current SEP licensing practice

- 4.3 There were a number of responses that reported problems within current SEP licensing practice. Some respondents said the telecommunications sector appeared to attract a high level of litigation or was not balanced. Various respondents, including SEP holders, implementers, legal services, trade associations and consultancy services, stated that issues associated with SEP licensing lead to litigation that is costly and time consuming. Some responded that negotiated outcomes should be incentivised. However, one respondent commented that the fact that there are some SEP disputes is not surprising given the large number of SEPs and the value of the technology involved.
- 4.4 Several respondents, mostly SEP holders, said SEP holders can experience problems due to hold-out<sup>73</sup> by implementers. Some said this is due to the lack of a meaningful disincentive for implementers that do not take licences. For further discussion of hold-out see section 2 on competition and market functioning. Some respondents said hold-out can lead to cash flow problems for SEP holders by extending the time between R&D and a licence being agreed. Some respondents stated that the need for litigation creates problems for SEP holders with large patent portfolios. One respondent also said licensing whole portfolios patent by patent is unrealistic but demanded by some implementers. Some respondents were also concerned about the possibility of SEP holders being told what level of the value chain to license at, and about potential requirements for greater transparency increasing costs and delays to SEP holders. Some respondents also suggested the SEP framework would be undermined by mandating certain methods of royalty rate determination or licensing at the component level.
- 4.5 A number of respondents discussed issues that create problems for implementers or potential licensees. Many respondents, mostly implementers, raised concerns about the current practice of granting of injunctions in SEP cases. Some commented that this creates uncertainty or financial risk for implementers. One responded that just over one in three UK businesses they surveyed indicated that the risk of injunctions decreases their incentive to develop new products. One respondent also expressed concern about forum shopping by SEP holders during disputes undermining aims to encourage innovation. Another respondent suggested there should be greater harmonisation of FRAND rules and the approaches of different courts adjudicating on SEP disputes.
- 4.6 Some respondents stated that issues were caused by a lack of transparency in licensing negotiations or SEP declaration. Some responses stated that this lack of transparency slows negotiations and hampers efforts to plan for costs. A respondent also reported that it is difficult to verify the essentiality of SEPs, particularly for whole portfolios.
- 4.7 A number of respondents said that hold-up<sup>74</sup> by SEP holders is an issue. For further discussion of hold-up see section 2 on competition and market functioning. One respondent stated that companies are compelled to litigate to get a FRAND rate as SEP holders demand excessive rates. Some respondents stated that UK court judgements create problems for implementers or potential licensees due to the possibility of global licence fees being set. These respondents stated this creates uncertainty, increases the cost of recovering unduly paid licence fees, affects the ability of small businesses to compete in foreign markets, makes negotiations unbalanced, or increases complexity of licensing. One of these respondents also stated that having to agree to a global licence before knowing the licence terms, as in *Optis v Apple*<sup>75</sup>, prevents small businesses making informed decisions.

73 Ibid. No. 7.

74 Ibid. No. 8.

75 *Optis Cellular Technology, LLC, et al. v. Apple Retail UK Limited, et al.* [2021] EWHC 2564 (Pat) Case No. HP-2019-000006.

- 4.8 Some respondents stated that there are issues for new market entrants or small companies as they may lack the resources or expertise to avoid or refute infringement claims, or to get a FRAND rate. One of these respondents pointed to companies in the IoT sector being unaware that purchased components may expose them to infringement claims. A few respondents also stated licences should be available to any third party that wants one. One respondent stated that SMEs are at a disadvantage due to the lack of transparency in the FRAND ecosystem. This respondent also stated that SMEs are at a disadvantage due to their inability to verify whether licensing rates and terms are FRAND, and whether representations made to them by SEP holders are true.
- 4.9 Some respondents also commented on whether SEPs should be considered different to other patents, legal remedies available in SEP disputes, and case law relevant to SEP disputes. Comments relating to the legal framework in SEP disputes and whether SEPs should be treated differently to other patents have been covered in this section below question 16. Further discussion of legal remedies available in SEP disputes is also provided below question 16. Some responses also commented on global licensing decisions by UK courts. These comments are discussed in section 6 on SEP litigation.

#### Question 14.

**As patents are territorial in nature, does the current patent regime create a fair global market? Do SEP licensing costs vary by region?**

#### Question 15.

**Are legal actions and injunctive actions taken equally against infringers of SEPs, regardless of their territorial presence?**

#### Summary of themes:

Respondents generally reported that there is variation in SEP licensing rates, SEP licensing costs and whether litigation is pursued. There were differing views as to whether the global SEPs market is fair and the perception of the UK within the global market. The main themes were:

- **Regional variation in SEP licensing costs.** Respondents reported that SEP licensing costs generally vary by region due to a variety of factors. Some said global SEP licences are common and can account for regional variations in licence rates
- **Fairness in the global market.** There were differing views as to whether the global SEPs market is fair and consistent between regions. Various factors were reported to cause an unfair global market
- **Factors affecting where litigation is pursued.** The jurisdiction(s) in which SEP litigation is pursued depends on a variety of factors, including costs, relevance of the market, and judgements relevant to likelihood of favourable outcomes
- **Perceptions of the UK courts as a forum for SEP litigation.** Some said UK courts are perceived to be favoured by or friendly to SEP holders

## Regional variation in SEP licensing costs

- 4.10 Respondents were asked whether SEP licensing costs vary by region. The majority of respondents that responded to question 14 said that licensing rates vary by region for a variety of factors, including market differences, such as production, manufacturing and sales costs, and product profits. Other factors respondents stated may cause regional variation in SEP licensing rates are differences in economic development level, differences in regional patent protection, differences in the approach of the national judiciary, and differences in litigation outcomes. Some respondents commented that such variation is appropriate. One respondent stated that precautions are required that prevent national or regional differences in SEP licensing practice from distorting competition, for example due to differing licence terms or rates.
- 4.11 Some respondents commented more broadly on costs of SEP licensing. Some respondents stated that the costs of licensing vary by region, for example due to differences in the pace of negotiations or due to enforcement costs. One of these respondents, however, stated that for bilateral negotiations the SEP licensing cost should be consistent irrespective of country if enforcement costs are not considered.

## Global licences and regional licence rates

- 4.12 A number of respondents, mostly SEP holders, stated that global SEP licences are common for large patent portfolios or in certain technology areas. Some of these respondents said that the cost and practicality of maintaining patent portfolios precludes patents being sought or enforced in every country. Some respondents commented that global licences can account for varying regional licensing rates. One respondent, however, stated that the accounting for regional variation in global licence negotiations may not occur in practice. Some respondents also stated that regional rates have been used in FRAND licenses determined by courts, with some respondents specifically pointing to the Unwired Planet decision<sup>76</sup>. One respondent went on to state that, because negotiations are required to be FRAND-compliant, royalty rates cannot be fixed arbitrarily and global licences should consider regional differences.
- 4.13 One respondent stated that most patent pools use a single global royalty rate, with one patent pool administrator also commenting that their patent pool uses a single global rate. However, one patent pool administrator stated that its patent pools use two different rates for different regions.

## Fairness in the global market

- 4.14 Respondents were asked about whether the current patent regime creates a fair global market. One respondent stated that there is a fair global market as the patent system is equally available to all market participants. Many respondents referred to global licensing agreements when considering the fairness of the patent regime. One respondent stated that global licences are efficient and standard practice. Another respondent stated that UK courts have been fair and pragmatic in their decisions. One respondent said the enforcement regime in the UK is balanced. One respondent stated that the territorial nature of the patent regime does not mean there cannot be a fair global market, provided there is the ability for a patent owner to obtain a global settlement.
- 4.15 Several respondents suggested the current patent regime does not create a fair global market. A number of reasons were provided for this. These included variations between jurisdictions in the awarding of injunctions, variations in the amount of damages awarded in different jurisdictions, unfairness due to regulators and courts that see their role as the protection of local industry, and foreign courts extending their jurisdiction

<sup>76</sup> Ibid. No. 13, Unwired Planet v Huawei.

unreasonably beyond their own territories. Other reasons provided were the costs and difficulty of enforcing SEPs, deliberate infringement by unlicensed users of standardised technology to avoid costs, the selective enforcement of patents by SEP holders based on geographical location of products and/or providers, SMEs being charged higher rates than larger or foreign companies, SEP holders refusing to grant licences at the component level rather than the end device level, and difficulties in trying to establish validity and essentiality of SEPs.

- 4.16 Several respondents also suggested court adjudicated global licensing does not create a fair global market. Several respondents stated that ‘forced’ global licensing by national courts has a number of negative consequences. See section 6 on SEP litigation for further discussion of the drawbacks of national courts determining global licences. One respondent stated that global licensing rates are seen as the price of doing business in the UK.
- 4.17 One respondent stated that it is a competitive disadvantage to have headquarters, logistics centres or manufacturing sites in the UK or Germany due to the risk of injunctions. This respondent said the current patent system incentivises having as much of what is necessary to provide a good or service located outside the UK or a major EU market. This respondent pointed to Apple having to temporarily close down stores and online as a result of litigation, stating this negatively impacts consumers and national economies.
- 4.18 A few respondents suggested international cooperation was needed for alignment of FRAND policies and SEPs licensing in different regions. One of these respondents said this would benefit all parties involved as it would increase legal certainty and reduce transaction costs in SEP licensing.

## Factors affecting where litigation is pursued

- 4.19 The call for views asked whether legal action against infringers is taken regardless of the territorial presence of the infringer. Some respondents stated that legal actions are taken against infringers regardless of their territorial presence. However, some said that it is not feasible for SEP owners to bring infringement proceedings in every jurisdiction where a SEP is infringed due to the cost and expertise required. Some respondents stated that actions are not taken equally against infringers, with some of these respondents stating that SMEs are seen as an ‘easy target’ in SEPs disputes due to their lack of resources. One of these respondents reported that SEP holders force SMEs to take licences at non-FRAND rates and then use these as a basis to extract greater licence rates from future potential licensees.
- 4.20 Many respondents stated that the jurisdiction litigation is pursued in depends on a variety of factors. Factors provided were whether the courts are perceived to be favourable to SEP holders or whether courts are perceived as biased towards local companies, the methods used to calculate FRAND rates, the perceived willingness of the court to grant injunctions against implementers, whether a court is willing to decide a global FRAND licence, court efficiency and costs, whether there are specialist IP courts and judges, the perceived quality of the patent system, the place of infringement, the relevance of the market, and the manufacturing and operating locations. A number of respondents stated that differences in the approaches of national courts leads to forum shopping. One respondent also said litigation is difficult in jurisdictions with weak IP systems or jurisdictions that see their role as protecting local industry. The respondent commented that this allows infringers to not take a licence in these jurisdictions and makes it difficult for competitors outside the region to compete.

## Perceptions of the UK courts as a forum for SEP litigation

4.21 Several respondents also commented on the perception of the UK as a litigation forum. Some SEP holders said that the decisions of the UK judiciary are regarded as pragmatic or seminal in SEP disputes, despite there being issues with the UK legal framework. Some implementers and other respondents stated that the UK is preferred by SEP holders or perceived to be friendly to SEP holders. Some of these respondents attributed this to the decisions in the Unwired Planet<sup>77</sup> and Optis<sup>78</sup> cases. Some respondents said that UK law is not aligned with the global consensus. Some respondents stated that the Unwired Planet decision incentivises SEP holders to assert patents against willing licensees acting in good faith. Some respondents made reference to SEP holders using ‘abusive’ tactics in the UK. One respondent stated that whilst the UK is perceived to be friendly to SEP holders, the SEP holder is usually based outside the UK and so the revenues from ‘abusive’ SEP enforcement leave the UK.

### Question 16.

**Does the current framework work for you in enforcing your rights conferred by holding the patent? For example, are injunctions an effective tool? What is the impact of anti-suit injunctions by implementers?**

#### Summary of themes:

There were differing views on the legal remedies available in SEP disputes and whether those currently available are appropriate and/or effective. There were also a number of responses relating to the legal framework available for SEP enforcement and whether SEPs should be considered differently to other patents. The main themes were:

- **Enforcement of patent rights.** There were a mixture of views as to how effective SEP enforcement currently is
- **Treatment of SEPs distinct from other patents.** There were a mixture of views as to whether SEPs should be treated differently to other patents when considering legal remedies available in disputes
- **Expected behaviour of negotiating parties.** Some respondents said UK and European case law provides a framework for FRAND-compliant negotiations. There were a mixture of views as to what behaviours should be considered ‘willing’ or ‘unwilling’ in negotiations
- **Injunctions.** There were a mixture of views as to whether injunctions should be used in SEP disputes and varied proposals on legal remedies that should be available in SEP disputes
- **Anti-suit injunctions (ASIs).** There were differing views as to the appropriateness and impact of ASIs. Respondents suggested varied proposals to discourage ASIs

<sup>77</sup> Ibid. No. 13, Unwired Planet v Huawei

<sup>78</sup> Ibid. No. 75, Optis v Apple.

## Enforcement of patent rights

- 4.22 Many respondents commented on the appropriateness and effectiveness of tools available to enforce SEPs. Some respondents said enforcement is expensive and is also slow or time consuming. One of these respondents stated that the length of the court process in the UK is ill-suited to the nature of SEP disputes as the scope of the licence being determined may change in disputes lasting years. This respondent suggested the process would be more effective if UK courts addressed financial aspects of disputes at an earlier stage so that parties could get an early view of what the court's likely determination on FRAND would be.
- 4.23 One respondent stated that the current framework promotes hold-out by implementers. Another respondent said that injunctions are an effective tool in patent enforcement but are very hard to obtain, making hold-out and deliberate infringement to avoid costs a worthwhile strategy for implementers. One respondent commented that implementers that are not willing to agree licences distort market competition and delay the ability to recover research costs which may force out companies with limited resources. One respondent said patent pools are efficient and effective means for SEP holders to be remunerated for their innovation.
- 4.24 Many respondents also commented on whether SEPs should be considered different to other patents, the legal remedies available in SEP disputes and the legal framework relevant to SEP disputes. These responses are dealt with in the subsequent paragraphs. Comments relating to the effects of global licensing decisions by national courts are discussed in section 6 on SEP litigation.

## Treatment of SEPs distinct from other patents

- 4.25 Some respondents commented on whether a distinction between SEPs and other patents is, or should be, made. Some respondents, mostly SEP holders, stated that all legal remedies available under relevant patent law should be available in SEP cases, including injunctions. One of these respondents also said the FRAND commitment is not a waiver of rights to injunctions and any such waiver to patent rights would need to be explicit. One respondent stated that UK courts have found that SEP holders do not automatically violate competition law by seeking an injunction or making an offer above that ultimately determined to be FRAND.
- 4.26 Some respondents, however, said that SEPs are different to other patents due to the FRAND commitment and due to the SEPs being indispensable to complying with a standard. Some of these responses stated that in committing to FRAND SEP holders voluntarily forgo certain rights to the patent, such as the right to exclude others from the standard, and that SEPs may warrant specific remedies in patent and competition law.

## Expected behaviour of negotiating parties

- 4.27 Many responses related to whether negotiating parties are considered ‘willing’ or ‘unwilling’ under the FRAND commitment and discussed relevant case law. The *Huawei v ZTE*<sup>79</sup> decision by the CJEU was pointed to by many respondents as providing a framework for FRAND-compliant SEP licensing negotiations and providing guidance on when injunctions may or may not be issued. Several respondents commented that further clarification on behaviour that is allowed or obligated in negotiations has been provided by the UK courts in the *Unwired Planet* case<sup>80</sup>.
- 4.28 A number of respondents commented that the framework provided by this case law was balanced, clear and/or effective. A further respondent expressed concern about apparent efforts to push for a ‘redefinition’ of willingness of an implementer that would protect an implementer from an injunction whilst they effectively engaged in hold-out.
- 4.29 Two respondents, however, reported it is not clear what a ‘willing licensee’ is. A further respondent said that no court has considered the meaning of ‘willingness’ in patent pool licensing. Some respondents made suggestions as to circumstances in which potential licensees should be considered ‘willing’. One respondent also suggested having FRAND issues addressed before other matters in SEP disputes to encourage negotiations and to judge whether parties are acting in good faith.

## Availability of injunctions within SEP disputes and hold-up

- 4.30 Many respondents discussed legal remedies available in SEP disputes, particularly injunctions. Comments on injunctions broadly fell into two categories. Some respondents thought that the availability of injunctions is useful in SEP disputes. Another group of respondents thought that injunctions were generally inappropriate in SEP disputes and should only be available in exceptional circumstances.
- 4.31 Several respondents, mostly SEP holders, stated that the availability of injunctions is essential in SEP disputes. A number of respondents said injunctions are needed, or can be useful, to get an implementer to negotiate in good faith or take a licence. Many respondents stated that injunctions are the only meaningful way of preventing implementers from avoiding paying FRAND royalties, with some of these commenting that restricting the remedies available in SEP disputes would exacerbate hold-out by implementers. Some respondents pointed to the Supreme Court decision in the *Unwired Planet*<sup>81</sup> case where an injunction, rather than damages, was awarded in asserting that injunctions are the only meaningful disincentive to hold-out. Several respondents stated that damages are not an adequate substitute for injunctions as damages are limited to the FRAND licensing rate. One respondent also suggested that in the UK, due to the decision in the *Optis v Apple*<sup>82</sup> case, there is a possibility that injunctions no longer discourage hold-out if to avoid an injunction the implementer simply needs to say at a later point in litigations that they will take a FRAND licence.
- 4.32 One respondent said that more limited access to injunctions would coerce SEP holders into offering sub-FRAND terms to avoid the prospect of litigation. They alleged this would disincentivise investment in standards development, particularly for research organisations and small businesses.

79 Ibid. No. 17, *Huawei v ZTE*.

80 Ibid. No. 13, *Unwired Planet v Huawei*.

81 Ibid.

82 Ibid. No. 75, *Optis v Apple*.

- 4.33 Commenting on hold-up, some respondents also suggested the risk of opportunism by SEP holders in seeking injunctions was overstated. These respondents stated that this risk had already been dealt with in the UK by the Unwired Planet decision which prevents the threat of an injunction to extract above FRAND rates. Some respondents also pointed to the Unwired Planet<sup>83</sup> and Huawei v ZTE<sup>84</sup> decisions as showing that injunctions are not inappropriate against ‘unwilling’ licensees. One respondent said UK courts should continue to apply discretion in the granting of injunctions.
- 4.34 On the other hand, other respondents, mostly implementers, broadly thought injunctions were inappropriate in SEP disputes. Several respondents stated that monetary relief is an appropriate remedy and is better aligned with FRAND principles. One respondent pointed to a European Commission judgement against Motorola<sup>85</sup>, stating the European Commission found damages to be an adequate remedy for SEP infringement. Some respondents stated that injunctions do not appear to achieve the desired outcome of the FRAND agreement as neither the SEP holder nor the implementer earn money. Several respondents stated that injunctions cause, or may cause, a disproportionate loss to the implementer compared to the SEP holder. One academic commented that the injunction awarded in the Unwired Planet decision was disproportionate to the estimated value of the infringed patents. A few respondents stated that the risk of injunctions discourages businesses from adopting standardised technology. One respondent also raised concerns that injunctions could be misused to threaten the integrity of critical infrastructure.
- 4.35 Some respondents said injunctions encourage or facilitate hold-up by SEP holders and the availability of injunctions creates an imbalance in licensing negotiations. These respondents stated the threat of injunctions puts pressure on potential licensees in negotiations and are, or can be, used to demand non-FRAND royalties. As evidence of this, one respondent pointed to decisions where the court determined FRAND rate was far lower than the licence rate initially offered by the SEP holder<sup>86</sup>. A respondent commented that the cost of non-FRAND rates is ultimately passed onto the consumer. Some said that this behaviour is regularly seen from non-practicing entities and patent assertion entities.
- 4.36 One respondent reported that it is current practice to grant injunctions without the SEP holder having engaged in transparent negotiations and that this is problematic. Some respondents stated that the pressure of accepting a non-FRAND licence under the threat of an injunction may be compounded by it taking longer to pursue invalidation procedures than to obtain an injunction.
- 4.37 A number of respondents were concerned about UK case law where injunctions can be issued if an implementer does not agree to a global licence and reported that this increases the leverage SEPs holders have in negotiations. One of these respondents commented that ‘forcing’ implementers to take global licences to avoid an injunction does not make sense to an SME operating in a local market. One respondent stated that the Unwired Planet decision allows SEP holders to obtain injunctions against willing licensees.

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83 Ibid. No. 13, Unwired Planet v Huawei.

84 Ibid. No. 17, Huawei v ZTE.

85 Case AT.39985 –Motorola–Enforcement of GPRS standard essential patents (Motorola) [519].

86 Including: Realtek Semiconductor Corp. v. LSI Corp., 946 F. Supp. 2d 998 (United States District Court, N.D. California (2013); Unwired Planet v. Huawei., [2017] EWHC 711 (Pat); TCL Comm’n Tech. Holdings, Ltd. v. Telefonaktiebolaget LM Ericsson, No. SACV 14-341 (C.D. Cal. Dec. 21, 2017); In re Innovation IP Ventures, LLC Patent Litig, MDL Docket No. 2303 Case No. 11 C 9308 (N.D Ill. Sep. 27, 2013); and Microsoft v. Motorola, 2013 WL 2111217 (W.D. Wash. Apr. 25, 2013).

## Proposals on the issuance of injunctions

- 4.38 Many respondents who thought injunctions were inappropriate in SEP disputes stated that injunctions should only be issued in rare circumstances. Suggested circumstances where injunctions may be appropriate are where the implementer is unable or refuses to pay damages, or where the defendant is not subject to a UK court that could award monetary compensation. One respondent pointed to the US case *eBay v MercExchange*<sup>87</sup> as an example of only awarding injunctions in exceptional circumstances.
- 4.39 One respondent suggested that injunctions should not be sought until a court has determined what the FRAND licence rate would be. Another respondent suggested that injunctions should only be available to SEP holders that have acted in good faith at all times and when implementers have not acted in good faith. One respondent suggested that an implementer should be able to avoid an injunction by invoking a FRAND offer submitted to the SEP holder by a supplier in its supply chain. This respondent also suggested that courts should be able to determine compensation payments instead of issuing injunctions. Another respondent said legislation should be changed to state that injunctions should not be sought unless an implementer has been shown to be demonstrably unwilling to enter into a FRAND licence.
- 4.40 Some respondents suggested that enhanced damages could be awarded instead of injunctions. One respondent said that enhanced damages, in addition to injunctions, should be awarded as this would incentivise implementers to enter FRAND licences at an early stage. They stated that an implementer facing the prospect of an injunction alone would be no worse off than if they had taken a licence earlier. Another respondent stated that there is currently no downside for licensees negotiating in bad faith as they ultimately only have to pay a FRAND rate.
- 4.41 There were various proposals regarding what should be considered by the courts when deciding whether to grant an injunction. One implementer made a broad statement that UK courts should apply more restrictive criteria when granting injunctions. Some of the respondents that thought injunctions should only be granted in exceptional circumstances said the issuance of injunctions should be subject to a proportionality test. For example, it was suggested there should be consideration of public and national interest for technology relating to critical infrastructure. One respondent stated that the lack of a proportionality test for injunctive relief puts small businesses at a disadvantage to large companies seeking to enforce patents of ‘dubious’ quality. One academic commented that more analysis is needed into whether injunctions are proportional to the value of infringed patents under English law. One respondent, however, stated that proportionality assessments for granting injunctions would restrict a patent holder’s rights, would disincentivise sharing of innovation, and would essentially be compulsory licensing.
- 4.42 Some respondents said that when deciding whether to issue an injunction the courts should consider the behaviour of both the SEP holder and the implementer, or the FRAND commitment made by implementers. One respondent suggested that when considering injunctions relating to patent pools there should be a presumption that the licensing terms of the pool are FRAND once there is broad acceptance of the pool in the market.
- 4.43 Some respondents called for policy statements or a change to the Patents Act to say injunctions should only be available for SEPs in exceptional circumstances. One of these respondents said that if it were clear that injunctions for SEPs were only available in very rare circumstances there would be less incentive to forum shop. One respondent called for a policy statement that SEP holders may not seek an injunction if the implementer acts in good faith. It was also suggested that SDOs could include limitations on when a SEP holder may seek an injunction or could require a commitment by the SEP holder to make a FRAND offer before seeking an injunction.

<sup>87</sup> *eBay Inc. v. MercExchange, L.L.C.*, 547 U.S. 388 (2006).

## Appropriateness of anti-suit injunctions

- 4.44 The call for views asked about the impact of anti-suit injunctions (ASIs). An ASI is an order made by a court preventing a party before it from commencing or continuing the same legal action in another or foreign jurisdiction or from enforcing a judgment obtained in foreign legal proceedings. Several respondents stated that the issuance of ASIs appear to be increasing in frequency. Though question 16 of the call for views refers to ASIs sought by implementers, one respondent commented that ASIs can be initiated by either SEP holders or implementers. One respondent stated that ASIs in themselves are neither good nor bad, the appropriateness of an ASI is dependent on the facts of the case. One respondent said that ASIs may be the most appropriate compromise to resolving issues that affect multiple jurisdictions in the absence of a better alternative.
- 4.45 Some respondents said that ASIs can be useful to implementers. A number of reasons were given for this. One respondent stated that ASIs can be useful where there is genuine overlap of the subject matter in dispute in different jurisdictions. Some respondents stated that ASIs avoid duplication of disputes in different jurisdictions and reduce costs associated with defending cases in multiple jurisdictions. One of these respondents also stated that ASIs reduce the risk of different jurisdictions coming to conflicting decisions. One respondent stated that an ASI may be sought by an implementer to prevent a SEP licensor from pursuing litigation in other jurisdictions whilst a judge decides on the FRAND terms of a licence. Some implementers stated that the availability of ASIs to implementers is necessary to prevent SEP holders pursuing litigation in jurisdictions considered favourable to SEP holders and to ensure that SEP licensors comply with their FRAND commitments. One respondent stated that an ASI may be sought by an implementer in anticipation of a SEP licensor seeking litigation to coerce the implementers into a global FRAND licence.
- 4.46 Some respondents said ASIs that have been issued by Chinese courts are problematic. One respondent stated that there have been cases where ASIs have been issued against a SEP holder without the SEP holder being notified of the court case, preventing the SEP holder from being represented in the dispute. One respondent said that ASIs have been issued by Chinese courts without due process. Some respondents suggested that in some cases Chinese courts have issued ASIs to assert jurisdiction over the setting of global FRAND rates and to restrict the ability of foreign SEP holders to obtain appropriate FRAND royalties. Several respondents pointed to the dispute launched by the European Commission against China at the World Trade Organization<sup>88</sup> (WTO) in asserting the problematic nature of some ASIs issued by Chinese courts.

<sup>88</sup> Dispute reference WT/DS611, 22 February 2022.

## Causes and consequences of anti-suit injunctions

- 4.47 Several respondents said that the seeking of ASIs is encouraged by a lack of consensus in the approaches of different national courts to FRAND issues. The respondents said this lack of consensus leads to forum shopping where parties look to start legal proceedings in a jurisdiction considered favourable to their interests. One respondent commented that ASI requests are made more likely by the setting of global licence terms by national courts. Another respondent pointed to the UK Supreme Court's decision in *Unwired Planet v Huawei*<sup>89</sup> as a factor in the alleged rise in the use of ASIs. One respondent stated that ASIs are the result of a lack of international rules that prevent a party from proceeding with litigation in multiple jurisdictions concerning the same subject matter.
- 4.48 A number of respondents said that the issuing of ASIs has negative consequences. Several respondents stated that ASIs are a problem for SEP holders and deprive SEP holders of the right to enforce their patents. Some respondents commented that ASIs are problematic due to the risk of fines and imprisonment when SEP holders seek access to justice in another country. A number of respondents stated that ASIs allow national courts to extend beyond their jurisdictions and undermine comity between national courts. Several respondents also reported that ASIs add to the cost, complexity and length of court litigation. A few respondents stated that ASIs increase legal uncertainty within dispute resolution. One respondent said ASIs incentivise parties to litigate in a jurisdiction deemed favourable to them rather than to focus on negotiated outcomes. One respondent suggested ASIs may result in regulatory capture where the courts of a country claim exclusive worldwide jurisdiction on a disputed matter.
- 4.49 A number of respondents made statements relating to anti-anti-suit injunctions (AASIs). AASIs prevent parties from pursuing ASIs in other jurisdictions. One respondent stated that the ability to obtain AASIs rendered ASIs an unproductive pursuit. One respondent said that AASIs were of benefit as they preserve a party's right to legal access in other jurisdictions. However, some respondents stated that AASIs can have negative consequences such as further increasing litigation costs and depriving implementers the ability to prevent SEP holders abusing their SEP ownership.

## Proposals on the issuance of anti-suit injunctions

- 4.50 A number of respondents said ASIs should be discouraged and suggested ways of achieving this. One respondent suggested ASI requests could be discouraged by viewing such requests as a sign of an unwilling licensee or licensor under the framework set out by the CJEU in the *Huawei v ZTE* decision<sup>90</sup>. One respondent said that the alleged issues associated with ASIs could not be solved at a national level. Some respondents said solving the alleged issues associated with ASIs would require convergence of jurisdictions on when injunctions should be available in SEPs disputes. One respondent provided multiple suggestions for discouraging ASI requests. These were having a framework that encourages negotiated outcomes, providing a single forum for arbitrating disputes related to global licences, and granting anti-enforcement injunctions instead of ASIs. The respondent said anti-enforcement injunctions do not stop foreign litigation. One respondent said that improving transparency in SEPs licensing may limit variation between different courts and reduce the incentive to forum shop. This respondent also suggested creation of a single tribunal to decide FRAND disputes.

<sup>89</sup> Ibid. No. 13, *Unwired Planet v Huawei*.

<sup>90</sup> Ibid. No. 17, *Huawei v ZTE*.

## 5. Licensing of SEPs

### Question 17.

**In your view, how should the SEPs and FRAND licensing ecosystem adapt to new standard development for emerging technologies?**

#### Summary of themes:

Some respondents said existing frameworks can adapt to new standard development for emerging technologies (such as IoT), while other respondents argued that there is a need for change. The main themes were:

- **The existing framework could work well for new technologies.** Some respondents said that there were already flexibilities and that licensing was an enabler of, rather than an barrier to new technology development. Building on existing good practice could help emerging technologies
- **The existing system needs to be improved.** Some respondents said that recent court cases have shifted the balance of the system in favour of SEP holders, and that this need to be rectified to benefit emerging technologies. Respondents explained how they thought the system should improve
- **The challenges of uncertainty and complexity.** Some respondents said that the complexity of SEP licensing and uncertainty about financial exposure when purchasing components were particular challenges for IOT start ups
- **Proposals for changes in licensing practices.** These included licensing higher up the value chain; more standardised licences and measures to improve transparency
- **The role of patent pools, SDO, and government or regulators.** Several respondents said patent pools could help, or said that SDOs or government could take action, including in the case of government by changing the law around the use of injunctions and the determination of global FRAND licensing terms

#### The balance of the existing system can work well for emerging technologies

- 5.1 Some respondents stated that the SEP licensing ecosystem generally functions well, particularly enabling market-specific practices, and the adoption of new markets, and that it provides for flexibility in licensing arrangements. One respondent argued that the benefits of SEP and FRAND commitments are a good compromise between SEP holders and implementers in the adoption of new technologies. One respondent said that while SEPs licensing isn't a one size fits all, SEPs licensing should not be considered as a barrier to the deployment of technology, but an enabler to the sharing of technologies.
- 5.2 A respondent argued that any concerns around opportunistic practices arising in relation to emerging technologies can be overcome, as the UK courts are well adapted to address those practices.

## The balance of the existing system needs to be improved for emerging technologies

- 5.3 However, there were other respondents who argued that there is a need to improve the existing SEP licensing ecosystem to ensure it benefits the development of licensing in new sectors and to ensure the frameworks are fair and balanced. A respondent also argued that ecosystem needs to adapt to assist implementers to strike favourable licensing deals to enable the counterbalance of what they described as the monopolistic position of SEP owners.
- 5.4 One respondent stated that their concerns related to the outcome of the UK court decision in *Unwired Planet v Huawei*<sup>91</sup>, and that as a result the SEPs ecosystem is now tilted towards SEP holders, which effectively facilitates hold-up. The respondent further argued that UK SMEs seeking to innovate in IoT will as a result be stifled by aggressive tactics used by foreign SEP holders, impacting on the development of IoT.
- 5.5 Another respondent stated that they saw an EU Exit opportunity for UK courts to reverse what they saw as a ‘pro-proprietor’ decision in *Huawei v ZTE*<sup>92</sup>. The respondent argued that UK courts could revert to the approach of directing parties to demonstrate the ‘willingness to negotiate’ in good faith, which would ensure technology implementers are able to innovate without unjustified threats.

## Building on existing good practice to support emerging technology

- 5.6 One respondent said that industry should apply what has worked well for current technologies, to ensure the ecosystem continues to adapt. Examples included blanket declarations of willingness to licence to allow the removal of penalties for late declaration and reduce incentive for “overdeclaration”; a register of declared patents with identifying paragraphs of the relevant parts of the standard; and the publication by SDO participants of targeted cumulative device royalty rates to give an indication to implementers to help them plan.
- 5.7 Some respondents stated that the IoT already provides an example of a new approach to licensing. One respondent referred to the Nokia arrangement with Nordic Semiconductor, arguing that the arrangement allows companies purchasing IoT hardware from a component supplier to also have the opportunity to acquire cellular SEP licences.

## General adaptations to licensing approaches to support emerging technology

- 5.8 However, several respondents suggested that licensing approaches needed to adapting to encourage standard development for emerging technologies. Some said the FRAND licensing system should strive to be more effective, better coordinated, and harmonised across jurisdictions to create a ‘one-stop-shop’ for implementers. Another respondent said that it should also provide a swift, simple, reliable, transparent, fair, cost-efficient mechanism to bring licensors and licensees together and offer incentives for good-faith behaviour. Other respondents argued that an efficient FRAND licensing ecosystem for emerging technologies should be configured so that licensing patterns for SEPs can be established, supply chains arranged according to market forces, and standard implementers are able to innovate on top of the standard technologies. One respondent said that the system should provide a low-threshold access for anyone who intends to add new functionalities (connectivity) to existing products, or who intends to introduce new products and services to get all necessary licences.

91 Ibid. No. 13, *Unwired Planet v Huawei*

92 Ibid. No. 17, *Huawei v ZTE*.

## The challenges of complexity and uncertainty for emerging technologies

- 5.9 Several respondents said that SEP licensing is not widely known or understood, especially outside of the technology sectors. Some argued that the lack of awareness means that innovative UK businesses, large and small, will be ill-prepared to exploit the opportunities and overcome the challenges of the future, such as presented by the IoT revolution. A respondent also argued that given the increasing importance of interoperability and IoT, and more companies active in sectors other than ICT, new companies to the sector might find it more difficult to navigate this complex landscape than companies who are experienced. One respondent also said that although the value of FRAND licences should be considered on a case-by-case basis and based on the end value of the product, valuation of emerging technologies may be difficult for both SEP holders and implementers.
- 5.10 One respondent stated that the IoT start-up community faced uncertainty around potential IP liability and financial exposure when purchasing components from suppliers. The respondent further argued that failing to prevent the refusal of licences to upstream suppliers is likely to materially damage the efficient development and deployment of emerging technologies or hinder their broad adoption across different markets and products.

## Licensing higher up the value chain to support emerging technology

- 5.11 Some respondents argued that licensing higher up the value chain (including FRAND rates) with a small number of existing chip or module manufacturers would provide greater predictability for the IoT start-up community, rather than having to have thousands of IoT companies having to individually negotiate licences.
- 5.12 Another respondent stated that for the IoT, it should be possible to procure fully licensed connectivity modules, with licensing taking place at a module or component level to prevent the harmful impact to innovation by enforcing SEPs at a device level. Respondents also argued that most modules and components that comply with a standard are use case agnostic.
- 5.13 Other respondents, majority of whom were implementers or licensees, argued that FRAND licences should be available to any third party irrespective of its position in the value chain. See summary of responses to Q.22 for further discussion of these issues.

## Standardised licensing agreements

- 5.14 A respondent stated that there needs to be more standardised licensing agreements to encourage the SEPs licensing to adapt to emerging technologies, particularly where the use of standardised digital technology is an ancillary feature. A respondent also stated that licensing in emerging technologies can cause issues for innovators building on standardised technologies as they are not able to invest in new innovative products if cost of using that technology is unknown.

## The benefits of improved transparency for emerging technology

- 5.15 Some respondents said there was a need for greater transparency in licensing. Some wanted licensees to take steps to disclose licensing terms and royalty rates to ensure evaluation of comparable licences. One respondent argued that there needed to be a way for all potential entrants to an emerging market to easily understand which SEPs are essential, which are optional, and for SEP claim charts to be available.
- 5.16 One respondent argued that it is important to adapt the SEP licensing framework to the standard development for emerging technologies by eliminating over-declaration, introducing mechanisms to value SEP portfolios, and solving FRAND disputes expeditiously.

- 5.17 Some respondents argued that essentiality checks should be standardised globally, with assessors being anonymous or random in their appointment. The respondents also stated that there should be a role for SEP holders to set out the essential technology to the modular level e.g. the sub-components of a radio access network (RAN), to ensure the facilitation of modular licensing for new entrants into the telecoms market.

### **Impact on open source**

- 5.18 One respondent discussed standard development in respect of open-source software. They argued that the MNO sector has been a dominant force in patents and standards through organisations such as ETSI. However, the respondent stated that their organisation is seeing a shift to Software Defined Networking and increasingly to the use of open-source software. The respondent also stated that this shift is creating conflicts between MNOs who wish to retain FRAND licensing patent royalties, while seeking to benefit from the use of open source.

### **Adoption of patent pools for SEP licensing in new standard development**

- 5.19 Some argued that patent pools are proven to foster the dissemination of standardised new technologies, or can offer access to standardised technologies for new implementers, such as SMEs. One respondent said that patent pools are uniquely placed to discover royalty rates for licences of new technologies, which helps balance the competing interests of licensors and licensees. Respondents also stated that the Avanci patent pool provides a successful licensing model that could be adopted for IoT licensing solutions. A respondent also argued that patent pool administrators could provide case studies of emerging technology licensing to help guide SEP holders in designing licences for different business models.
- 5.20 One respondent stated that as soon as a final version of a new standard is available (or even before) forming of a patent pool should be considered. Another respondent argued that patent pools for emerging technologies should be encouraged where there is a genuine public interest in lowering the licensing cost. However, one response said that the forming, promoting and running of a patent pool should be done outside of a SDO to avoid interference.

### **A role for Standard Development Organisations (SDOs) to support licensing of emerging tech**

- 5.21 One respondent stated that difference in patent policies between SDOs make for a healthy competitive environment among technologies, and that emerging technology developers have a choice of formulating standards and are able to contribute their technologies to a variety of existing SDOs or forming a new SDO. Another respondent also stated that changing SDO policies could have a negative consequence on SEP holders by mandating certain licensing terms/models and such changes are drawn from implementers 'wish lists'. The respondent referred to the IEEE's 2015 revisions to their IPR policy and the use of letters of assurance (LOA) required by innovators, arguing that this goes beyond FRAND requirements and has resulted in fewer patent declarations and LOAs.
- 5.22 However, some respondents commented that SDOs could play a different role in light of new standard development for emerging technologies. One argued that SDOs have a responsibility to engage the wider stakeholder community, including academic, regulatory and government. Another respondent stated that the role of SDOs is to ensure SEP licensing adapts to emerging technologies, raised questions around how SDOs deemed to be central to emerging technologies are governed, and what can be done to increase participation at those SDOs of companies which operate in the UK.

- 5.23 Some respondents made the general point that there is a benefit for emerging technologies if there are balanced SDO IPR policies in place. Some respondents proposed SDOs amend their existing IP policies to accommodate SEP licensing for emerging technologies. Proposals included changes to disclosure policies to help SDO participants evaluate whether technologies are being considered for standardisation are covered by patents. It was also argued that if SDOs updated their patent policies this would help to provide guidance and clarity as to disclosure and other FRAND terms. Some argued that in the telecoms sector, there has been greater clarity, reduced SEP licensing-related abuses and reduced litigation as a result of the 2015 IEEE policy revisions.
- 5.24 There were several other proposals put forward in relation to negotiation and dispute resolution. One respondent said that SDOs could implement a defined process for implementers and SEP owners to negotiate licences, so that implementers who do not follow this process lose the benefit of the FRAND rate. Some respondents also commented that any further SDO regulation should ensure there are dispute resolution procedures built in. One respondent said that would overcome the risk of injunctions or unwarranted tactics being brought by parties. Another respondent said SDOs should put in place binding arbitration as a means of resolving global disputes over FRAND royalties.

## Regulatory and government intervention

- 5.25 Some respondents argued that there was not a need for regulatory intervention to ensure SEP licensing adapts to emerging technologies as existing laws, as there are existing measures available, including WTO agreements and national level laws, to provide sufficient obligations. One respondent argued that such intervention could fundamentally alter globally competitive standard development through non-market factors, and overregulating may remove flexibility in the current system.
- 5.26 Some respondents were of the alternative view and argued for government intervention to ensure a clear framework is in place, particularly to help identify responsible SDOs and to ensure greater levels of transparency around SEPs.
- 5.26 One respondent argued that challenges associated with SEP licensing can lead to a focus on legal expertise and detract from focus on quality and choice in the components available. The respondent argued that the government should support technology adopters in enabling access to FRAND prices, when licences for patents covering new technologies are being sought.
- 5.27 One respondent stated that the current SEP litigation framework may threaten IoT opportunities in the UK, with UK SMEs being vulnerable to holdup due to the lack of negotiating expertise, resources and global capacity to manufacture and market products abroad if subject to a domestic injunction. The respondent also argued that without intervention, the licensing at the end product level will be even more problematic as the different types of IoT devices increase, and manufacturers of IoT devices may avoid making investments in the UK until after global licences are agreed. The respondent proposed amendments to the Patents Act 1977, which included a provision which states that in the absence of consent of both parties, a court should not determine global portfolio rates for SEP licences. Also, the respondent argues that there needs to be a provision stating that injunctions on FRAND-committed SEPs should only be granted in exceptional circumstances where the SEP holder cannot obtain through the courts the FRAND royalties it voluntarily agreed to accept for use of its patents.

- 5.28 The same respondent also argued that UK Government should create non-statutory guidelines (e.g. competition guidelines) to ensure fair, transparent and efficient access to licensing opportunities by endorsing valuation principles based on the smallest saleable patent practicing unit (SSPPU).
- 5.29 Another respondent also stated that there is a role for competition authorities to take action where appropriate to address anticompetitive conduct by SEP holders. The respondent also stated that the UK Government should encourage SDOs to adapt their policies to address abuses such as hold-up. Hold-up is dealt with in more detail within the market functioning section of this summary report.
- 5.30 A respondent representing the IP legal services sector also argued that there needs to be widely accessible and balanced information concerning SEPs and FRAND and licensing, and this should be made available by a neutral platform e.g., the UK IPO, to educate businesses, particularly SMEs which may well need to tackle licensing issues in the future.
- 5.31 There were a number of general concerns that were raised in context of emerging technologies which are discussed in more depth in other sections. These include issues related to the threat of injunctions for implementers and the lack of regulatory “safe harbours”. Responses and evidence concerning the right to injunctive relief and FRAND determinations are dealt with in section 6 on SEP litigation below.

#### Question 18.

**What if any, flexibilities exist within the IP framework that could improve the efficiency of obtaining a license for implementers?**

#### Summary of themes:

Responses to this question varied with differing views from SEP holder and licensees or implementers. The main themes were:

- **Sufficient flexibility in the current IP framework.** Several responses said the IP framework already has sufficient flexibility to improve efficiency around obtaining a licence
- **Market led approaches to improve efficiency.** Some respondents said that market led approaches such as patent pools could help
- **Changes to the current frameworks should be made to improve efficiency in SEP licensing.** Responses included recommendations for guidance, regulation or legislative change, for example to make licences available higher up the value chain, restrict the use of injunctions or improve transparency.

## Sufficient flexibility in the current IP framework

- 5.33 Some respondents argued that the IP frameworks are inherently flexible and argued that the current framework rightly leaves appropriate room for industry solutions. Some respondents also stated that the existing framework works without difficulty for implementers who are willing licensees. Respondents said that the judicial precedent in cases such as *Unwired Planet<sup>93</sup> v Huawei* and *Huawei v ZTE<sup>94</sup>* provide a balance for SEP/FRAND licensing negotiations by imposing obligations of good faith conduct on both parties. One response said the decision in *Huawei v. ZTE<sup>95</sup>* has demonstrated that the current framework works appropriately. They said that the decision did not create a strict set of rules that parties must follow, nor provide justification for creating a one-size-fits-all approach. And any attempt to further define FRAND requirements would inhibit different licensing models that suit specific purposes.
- 5.34 Additionally, several SEP holders argued that the IP framework does not require adjustments to improve the efficiency of licensing. One respondent stated that for standardised digital technologies, protected by many SEPs, agreement on FRAND terms depends far more on an assessment of the SEP owner's overall contribution to the standard than on the provisions of IP law. That assessment could be facilitated by better understanding of the standard and of the technical significance of the various inventions contributed by the SEP owner to the standard.
- 5.35 Some argued that the 'licence-to-all'<sup>96</sup> approach is misplaced, and incorrect as a matter of law<sup>97</sup> and commercial practice<sup>98</sup>. Respondents stated that not all implementers along the supply chain need to have a licence and that some parties justify the approach to 'licence-to-all' by making reference to excerpts of some IPR Policies<sup>99</sup>, and do not interpret those specific excerpts in the overall context they are a part of. A SEP holder also stated that licensing generally occurs at a single point in the supply chain and is generally regarded as the most efficient approach to licensing. Another SEP holder said that in relation to telecoms, it is standard industry practice to licence at the OEM level<sup>100</sup> to enable greater efficiency, to minimise transaction costs and increase legal certainty. The respondent also referenced the ETSI IPR policy, which foresees "have-made"<sup>101</sup> rights to ensure the entire value chain is able to benefit from a licence.
- 5.36 One stated that they do not see difficulty within the IP frameworks but difficulties with efficiency in respect of licensing, due to implementers drawing out negotiations to avoid payment. In these circumstances, the respondent states that the only option currently is to go to court, which they argue is not efficient. The respondent also argued that matters would be more inefficient if courts were unable to deal with global licences.

93 Ibid. No. 13, *Unwired Planet v Huawei*.

94 Ibid. No. 17, *Huawei v ZTE*.

95 Ibid.

96 'Licence to all' can be understood to mean each implementer of a standard along the supply chain has the right to seek and obtain a licence for a SEP committed to FRAND terms i.e. component manufacturers, suppliers or assemblers within many others would have the right to ask for a licence; FRAND as Access to All versus License to All, *Journal of Intellectual Property Law & Practice*, Volume 14, Issue 8, August 2019, Pages 642–651,

97 FRAND Licensing Levels under EU Law, *European Competition Journal* (2021), Jean-Sébastien Borghetti, Igor Nikolic, Nicolas Petit, link: [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=3532469](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3532469)

98 *Sharp v Daimler*, District Court of Munich, judgment dated 10 September 2020, Case-No. 7 O 8818/19

99 E.g. the common IPR policy of The Institute of Electrical and Electronics Engineers (ITU-T), (International Organisation for Standardisation) (ISO) and The International Electrotechnical Commission (IEC)

100 An OEM (original equipment manufacturer) makes devices from component parts bought from upstream suppliers. OEMs include manufacturers of end-products and manufacturers of components and other articles that combine parts bought from upstream suppliers.

101 'Have made' rights permit a licensee to have an unlicensed third party make a licensed product for the licensee; See *Intel Corp. v. Broadcom Corp.*, 173 F. Supp. 2d 201, 228 (D. Del. 2001).

- 5.37 Another respondent said that expert determination and arbitration are available under the current framework, for parties to obtain the necessary licence for implementers, however, the cost and time of these flexibilities may be unlikely to constitute a significant improvement on litigation.

### Changes are needed to improve the efficiency of obtaining a licence for implementers

- 5.38 However many respondents argued that some changes to the existing framework was needed. These mainly included implementers, licensees, representative groups and legal services and academia, although there were some SEP holders who also advocated changes. Many respondents referred to existing challenges for SMEs in making the case for change and one respondent stated that the current patent system in the UK makes it a competitive disadvantage to be located in the UK.
- 5.39 The respondent also stated that changes need to incentivise good-faith behaviours and that bad-faith behaviours to be sanctioned, regardless of what party is related to.

### Market led approaches to improve efficiency

- 5.40 There were a number of responses that made suggestions and proposals for market led approaches to improve efficiency. In particular, respondents referred to patent pools as an option to provide greater flexibility to improve the efficiency of obtaining a licence for implementers. Although, a respondent raised a concern that although patent pools may be considered as a market approach, they are not created for more niche standards, and as they are run by private companies, the pools tend to be only established for niche 'beneficial standards'.
- 5.41 Respondents also suggested a model of independent licensing agents being useful to arranging licences for implementers. A respondent provided a specific example of a model of an independent licensing agent that should be supported. The respondent referred to Rational Patent ('RPX')<sup>102</sup>, explaining that RPX has shown itself to be a useful tool for arranging licences for implementers as it acts as an agent, and there is no unwanted collaboration or illegal collusion, neither amongst licensors nor amongst licensees

### Changes to the framework to provide licenses higher in the value chain

- 5.42 Several respondents said there should be guidance, regulation or changes to legislation to promote the provision of licenses higher in the value chain. Some respondents related this to the doctrine of exhaustion. They argued that reinforcing or better respecting the doctrine of exhaustion would make licensing more efficient. A respondent also stated that the doctrine of exhaustion has worked well in other sectors such as the automotive sector, where traditionally suppliers ensure that all third-party rights are exhausted before components are sold onwards in the supply chain. Respondents also stated that without exhaustive licences at the component level, SMEs and incubation businesses are exposed to patent litigation and/or uncertain licensing costs. Therefore, they said government should consider guidance or amendment to the Patents Act 1997 to ensure that any company willing to take a licence on FRAND terms is able to get one.
- 5.43 Other respondents said legislation such as the Patents Act 1997 should ensure SEP licenses are available to any company that wants a licence for more general reasons of efficiency or to discourage patent hold up. One respondent stated it would be helpful if patent law imposed restrictions to oblige SEP owners to license upstream where licensees are much fewer in number and more knowledgeable about the technology.

<sup>102</sup> [RPX | Patent Risk Management \(rpxcorp.com\)](https://www.rpxcorp.com/), RPX' acts as a facilitator to bring licensors and licensees together in groups, to get efficiencies of scale in licensing.

- 5.44 Some respondents also stated that the Government and the CMA should provide additional guidance in respect of SEP licensing, that is equivalent to what exists in respect of the Horizontal Guidelines<sup>103</sup>. Respondents suggested such guidance would deal with SEP holders refusing to licence potential licensees higher up the value chain and cover other matters such as the use of injunctions discussed below. Respondents said this would help new entrants and lead to significant efficiencies in the broader FRAND licensing ecosystem. One respondent also said that non-statutory guidelines should also ensure fair access to licensing opportunities by endorsing valuation principles based on the smallest saleable unit.

### Changes to the framework to restrict the use of injunctions

- 5.45 Respondents also argued for guidance, regulations or legislative change to restrict the use of injunctions. Some argued that legislative changes could include provisions to ensure no injunctions can be sought except in limited or extreme circumstances and are not used where damages would be an adequate remedy. One responded stated that where infringements have been identified, licensors can be compensated by monetary damages. Other respondents argued that guidance should ensure that there are no injunctions for SEP claims, save in exceptional circumstances. This could include action by government or the CMA (e.g. through the Horizontal Guidelines).
- 5.46 Some respondents said that rules should be introduced to ensure no enforcement actions can happen without a court order, or notice, and only after a proper hearing of the merits of claims.

### Proposals for introduction of “principles” governing SEP licencing

- 5.47 Respondents also proposed the IP framework could be improved through the introduction of a number of “principles” which would benefit SMEs. One principle suggested was that injunctions and other exclusionary remedies should not be sought by SEP holders or allowed except in limited circumstances. The implementer or licensee is always entitled to assert claims and defences. Other principles proposed included the need to ensure when a FRAND-encumbered SEP is transferred, the FRAND commitments follow the SEP in that and all subsequent transfers. Respondents also argued that the patent holder should not require implementers to take or grant licences to a FRAND-encumbered SEP that is not essential to the standard, unenforceable, or not infringed, or invalid. Respondents also stated that there should be a principle to define the circumstances of a reasonable rate for a valid, infringed, and enforceable FRAND-encumbered SEP. Additionally, one of the respondents argued the introduction of such principles should be adopted to overcome what they saw as damaging case law developments in the *Unwired Planet*<sup>104</sup> decisions.

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103 Ibid. No. 30.

104 Ibid. No. 13, *Unwired Planet v Huawei*.

## Changes to the framework to promote transparency

- 5.48 Respondents also argued that significant improvements could be made to the efficiency of obtaining a licence by ensuring there was greater transparency in terms of FRAND licensing rates – these issues are discussed more fully within the transparency section above.
- 5.49 One respondent stated that there needed to be more flexibility in the UK Courts along with a legislation driven system to establish (and verify) the essentiality of SEPs. The respondent stated that there were solutions that could be adopted, including a standardised set of licensing terms, set by an SDO should be available, and if a SEP holder then refused to provide a licence to an implementer, then interim relief in the form of an equitable declaration should be available.
- 5.50 Another respondent stated that legislation could be amended to place requirements on SEP holders to ensure there is a duty of honesty, full disclosure, good faith and transparency for implementers obtaining a licence. Another respondent argued that framework changes were required to impose a duty of candour to the IPO when standards are implicated by a patent application.

## Changes to the framework to endorse the use of discounts

- 5.51 A respondent also argued that UK SEP policy should include policy statements that announce that discounts should be acceptable as an element of FRAND pricing for past use of SEP protected technologies. The respondent provided an illustrative example where such an approach was used by several patent pools including Avanci, which grant significant discounts for past use of the 2G/3G/4G cellular communication SEPs they license.

## Changes to the framework to reduce the attractiveness of hold-out

- 5.52 One respondent to this question stated that a suitable framework needs to be provided to remove the attractiveness of 'hold-out' to an implementer and to help SEP owners collect their FRAND licences without having to spend significant money and time before the courts.

**Question 19.**

**Do you have any views on any other ways of improving efficiency within the licensing landscape of SEPs?**

**Summary of themes:**

Generally, respondents to this question agreed that there are ways to improve the efficiency of SEP licensing. Respondents provided a number of proposals for improvements summarised below.

- **Use and access to patent pools.** A number of respondents highlighted the benefits of existing patent pools and the need for the creation of new pools to improve efficiency of licensing
- **Improvements to transparency.** Respondents raised concerns about the lack of transparency of essentiality, of pricing and terms, and proposed greater transparency as a means to improve efficiency
- **Good faith negotiations.** Respondents gave differing views on how to promote good faith in negotiations
- **Guidance around SEP licensing.** A number of respondents put forward arguments to introduce SEP licensing guidance to ensure there could be improved efficiency
- **Changes to provide access to licenses higher up the value chain, specify SSPPU as the basis for licensing or remove the effect of Unwired Planet.** These proposals on which more detail is summarised elsewhere were also submitted in response to this question
- **Other reflections.** Some respondents commented on policy considerations such as the need for an evidence-based approach or lessons that could be learned from other licensing models

**Use and access to patent pools to improve efficiency of SEP licensing**

- 5.53 A number of respondents to this question said that improvements to SEP licensing could be achieved through better use or access to patent pools.
- 5.54 A respondent stated that the government should promote industry-driven/market-led initiatives, such as independent patent licensing platforms or pools to improve efficiency within the licensing landscape of SEP. A respondent also stated that an increase in the establishment of patent pools, and adoption of patent pool rates for technical contributions would avoid excessive rates. The respondent also stated that there should be a coordination and establishment of a unified sub-patent pool for certain technical fields to enable implementers to get authorisation quickly and without double payment. Another respondent stated that pools create an opportunity to assess the implementers 'willingness' to take a license, particularly if there is an infringement by an implementer, who is aware of the availability of an established patent pool license.
- 5.55 However, respondents stated that they had concerns around the way pools currently operate, suggesting improvements could be made that around the good faith participation and behaviour in pools. A respondent also stated that there are often multiple pools for the same technology, even the same patents, in existence. Pools generally required a certain level of expertise on the part of the potential licensee, and that expertise was not usually available at SMEs or companies. The respondent also argued that current pools are designed to cover either limited and narrow areas of technology, or focus on specific 'verticals' like Avanci, and are not designed to handle entire technologies like 2G, 4G or 5G. The respondent also stated that patent pools are not appropriate for supporting market entrance of new players e.g. for Open-RAN.

## Improvements to transparency of essentiality

- 5.56 One respondent argued that the main problem of transparency is the lack of data around licensing i.e. rate data to benchmark, and not more data around SEPs themselves.
- 5.57 However, several respondents proposed improvements to transparency of essentiality as a means to improve licensing efficiency. One respondent stated problems exist with the lack of transparency around which patents are actually SEPs due to the declaration requirements. This impacts on FRAND licensing negotiations, which may be based on the number of patents declared as essential. The respondent also put forward proposals to overcome these concerns, which included a two-step process creating a notification stage as currently exists, and then a step that creates confirmation of essentiality. The respondent also argued that some form of sampling might be used for very large portfolios particularly to overcome the potential cost of confirming essentiality.
- 5.58 Other respondents suggested the introduction of automated tools for essentiality assessments. It was proposed that such tools could generate 'SEP landscape assessments' for particular standards which could then be used in licensing negotiations. The respondents also stated that the SEP assessments and assessors should be certified, qualified and independent of the persons performing SEP assessment through an international facility to certify such persons and SEPs are assessed in accordance with such requirements.

## Improvements to transparency of pricing and terms

- 5.59 Some respondents stated that greater pricing transparency would reduce the need for commercial negotiation and reduce disputes related to 'non-discrimination' aspect of FRAND. One respondent argued that implementers need information from SEPs holders when negotiating a licence, and this doesn't necessarily mean they are undertaking hold-out practices.
- 5.60 Respondents stated that licensees are currently incentivised to litigate to get access to all past licensing deals of SEP holder and there should be obligations during negotiations to disclose existing relevant licensing agreements, e.g. via 'confidentiality clubs'. Respondents argued that there should be comprehensive disclosure of past licensing information. Without this implementers are incentivised to litigate to get past licensing information to assess whether the licence offer is comparable to offers to other licensees.
- 5.61 Another respondent argued that there should be a duty of candour on SEP holders to be honest in their negotiations and representations and efficiency could potentially be improved through the adoption of licensing negotiation groups<sup>105</sup>, particularly for SMEs. The respondent provided an example of chipset suppliers negotiating licences for SEPs, and sold chipsets with SEP licences paid, and argued that this would ensure the same price was paid for the same patents.
- 5.62 One respondent stated that efficiency in the SEP licensing landscape could be improved by obliging SEP owners to announce royalties early and publicly. The respondent argued that SEP owners should be allowed to coordinate this, due to SEP licences being complements (not substitutes), as this would not be anti-competitive practices and should lead to lower prices. Another respondent also stated that royalty tables should be published and kept under review as to what qualifies FRAND rate. Another respondent argued that licensors should disclose licence terms and royalty rates that allow for the evaluation of comparable licences.

<sup>105</sup> Licensing negotiations groups (LNGs) are understood to be the formation of a licensing negotiation group by implementers to collectively negotiate with SEP owners and patent pools; [Nikolic, Igor. Licensing Negotiation Groups for SEPs - Collusive Technology Buyers Arrangements: Pitfalls and Reasonable Alternatives \(September 19, 2021\). les Nouvelles \(December 2021\).](#)

- 5.63 Some responses argued a role for SDOs to provide greater pricing transparency. In particular, a respondent stated that SDOs should be responsible for approving a pricing structure for each SEP with the patentee, while another respondent argued that there is a need for SDOs, along with governments and courts to encourage SEP holders to disclose sufficient information before seeking a licence.
- 5.64 One respondent said that confidentiality provisions of SEP license made price discovery difficult for both licensors and licensees, but said that pre-litigation discovery accessible to each party's legal representation, could in some cases enable more efficient resolution without litigation or arbitration. Other respondents also argued that measures aimed at avoiding the use of overly-restrictive terms in non-disclosure agreements should be considered.

### Good faith negotiations to improve efficiency in SEP licensing

- 5.65 One respondent referred to their view that the licensing framework affirmed in *Huawei v. ZTE* provides sufficient clarity, legal certainty, and balance in negotiations in response to this question. They added that a number of jurisdictions also expect that businesses undertake due diligence before launching products which implement third party IP, and that this should be a relatively simple exercise in the open standards environment.
- 5.66 However, a number of respondents representing a range of stakeholder groups put forward arguments and proposals around the principle of good faith negotiations as a means of improving efficiency. Generally, SEP holders argued that there should be certain deterrents available to prevent bad faith by licensors or licensees. This could include the introduction of policy, which focusses on facilitating negotiated outcomes e.g., add a punitive element for bad faith behaviour by licensors or licensees; or creating an account controlled by a third party into which implementer should transfer reasonable amounts agreed by the parties or a neutral third party, after an implementer has declined a FRAND offer. One respondent argued that improvements can be made by addressing the conduct by certain potential licensees that is contrary to good faith negotiation and which delays the conclusion of FRAND licences.
- 5.67 Other responses raised concerns about the conduct of SEP holders. Some respondents said that the availability of the threat of injunction incentivises SEP holders to paint the licensee as unwilling in negotiations and to then pressure the licensee into a non-FRAND deal. One respondent who argued this referred to the (then ongoing) US case of *Koninklijke Philips v Thales DIS*<sup>106</sup>, whereby the implementer agreed to take a global FRAND licence determined by a US court, but the SEP holder still sought an injunction ("exclusion order") with the International Trade Commission.
- 5.68 One respondent who raised this concern stated that the legal attributes of the FRAND licence statement should be clarified, and efforts should be made to balance the interests of SDOs, patent holders, standard implementers and consumers. The respondent also commented that if the implementer is required to negotiate in good faith, then there should be clear and exemplary guidelines on compliance or violation of the obligation to negotiate in good faith. Another respondent stated that clarity and stability on issues such as the availability of injunctions would help to make FRAND licensing more efficient and predictable. Other respondents stated that there needs to be an enforced obligation for the patent holder to negotiate in good faith, to improve the efficiency of licensing.

<sup>106</sup> *Koninklijke Philips N.V. v. Thales DIS AIS USA, LLC*, No. 2021-2106 (Fed. Cir. July 13, 2021), ECF No. 35.

- 5.69 Some respondents related the issue of good faith in negotiations to transparency. One respondent said that licensees should engage reasonably with a licensor and should not needlessly delay discussions, but also stated that SEP holders fail to provide the necessary information to potential licensees to determine whether the alleged SEPs are infringed and that the SEP holder's offer is FRAND. Another respondent argued that greater transparency supports good faith negotiations, which could include an obligation for full disclosure of all relevant facts concerning the validity and essentiality of patents in a portfolio, along with details of the relevant standards landscapes and the basis upon which rates are calculated. The respondent further argued that SEP holders could provide a warranty, undertaking or representation that they are offering a FRAND license.
- 5.70 One respondent argued that it was important to understand the difference in obligations between parties, particularly for SEP holders, who have made contractual commitments to license on FRAND terms, while potential licensees do not. Therefore, the respondent argued that there needs to be a focus on whether the licensee's so called "willingness" to license as a test for whether injunctive relief is appropriate, is misplaced.

### **"License to all" SSPPU basis for royalty rates, and removing the effect of Unwired Planet**

- 5.71 One respondent stated that there were a number of ways of improving licensing of SEPs to promote the public policy of restoring the right balance of negotiation equality as a measure of fairness and remove discrimination. The respondent argued that 'licence to all'<sup>107</sup> will help ensure fully licensed components are available to integrators, which will in turn facilitate market entry by new, innovative players and SMEs in the IoT sector. The respondent further stated that a 'license to all' SEP policy will enable SMEs to grow and invest in their business, without fearing patent infringement claims based on components from their SSPPU suppliers. The respondent also argued for using SSPPU as basis for royalty rates and cross-checking FRAND rates with a top-down approach and that upstream licensing should be made more efficient and safer for a business.
- 5.72 Another respondent argued that changes should be made to the Patents Act 1977 to improve the way the current SEP licensing landscape operates and remove the effect of the Unwired Planet<sup>108</sup> case. This would reduce the volume of SEP court action in the UK.

### **Better dispute resolution mechanisms**

- 5.73 One respondent stated that efficiency could be improved in the licensing landscape if dispute resolution, including litigation, is made more accessible for large and small companies. Some stated that the evaluation of FRAND rates should be available without the need to litigate, but did not see the availability of FRAND rates being resolved through alternative dispute resolution (ADR)<sup>109</sup>, as these were considered equally as expensive and complex and do not have the benefit of transparency that litigation has.
- 5.74 A respondent argued that the way legal frameworks and courts operate in this area required earlier access to judicial assessment of FRAND terms, swifter UK court procedures for SEP licensing disputes and greater use of ADR. The respondent also argued that an international tribunal for determination of FRAND terms on a voluntary contractual basis could provide an alternative route to resolution of FRAND disputes and improve efficiency of licensing.

<sup>107</sup> Ibid No. 96.

<sup>108</sup> Ibid. No. 13, Unwired Planet v Huawei.

<sup>109</sup> ADR refers to dispute resolution means that do not involve court litigation.

## Further guidance and information around SEP licensing

- 5.75 A respondent stated that there needed to be more publicly available guidance and information, particularly for smaller entities to overcome the secrecy in licensing negotiations. Another respondent suggested that there needs to be guidance that educates SMEs and new users of standardised technologies on relevant case law and clarify the obligations on both parties to come to a negotiated licence. A SEP holder also stated that efficiency could be improved for SEP licensing, if there were improvements to the understanding of the technology itself and the standardisation process by which it was developed. The respondent also stated that awareness of the requirements and availability to license new products and services was needed, along with support around use of third-party expert services and intelligence reports where an implementer lacks technical expertise or industry knowledge.
- 5.76 A respondent stated that SMEs are at a greater risk of striking unfavourable licensing terms due to their lack of resources, and the respondent proposed that guidelines on FRAND from independent policy makers or courts would be useful to provide a measure of clarity to negotiating parties. The respondent also referenced the approach the Japanese Ministry of Economy, Trade and Industry has undertaken in respect of issuing guidelines as a useful example.
- 5.77 A respondent also argued that there should be small business-focused education and resources on standards and SEP licensing issues, and that the IPO could also hold targeted listening sessions and consultations to educate and take in feedback.

## CEN/CENELEC European Committee for Electrotechnical Standardisation reports and guidance

- 5.78 Responses to this question also included support and opposition to the adoption of CEN/CENELEC reports and guidance. One respondent stated that any guidance on existing practices in SEP licensing, should be considered in contrast to the CEN/CENELEC Workshop Agreement Report (CWA9500). The respondent, criticised this report, stating it was a policy document targeted at devaluing SEPs to reduce short term costs for implementers of standardised technologies without any regard for the detrimental long-term effects on standardisation and consumer benefits that this would cause.
- 5.79 Another respondent argued that sufficient guidance on SEP licensing is included in the CEN/CENELEC multi stakeholder report “Core Principles and Approaches for Licensing of Standard Essential Patents”<sup>110</sup>. Another respondent also stated that the focus should remain on high-level principles to ensure efficient and good faith licensing and the timely conclusion of FRAND licences and align to those set out in the CEN/CENELEC Workshop Agreement, CWA 17431<sup>111</sup>.
- 5.80 Another respondent argued that the UK government should provide guidance on SEP licensing which can reflect the key principles included in the CEN/CENELEC Workshop Agreement Report (CWA9500)<sup>112</sup>. The respondent also stated that guidance principles to improve efficiency in SEP licensing should include injunctions only being permitted and available in limited circumstances. The respondent also argued that there should be a principle that prevents SEP holders from leveraging the courts of a single jurisdiction to force a licensee into a global portfolio licensing through the threat of an injunction (the respondent argued that this is a form of hold-up). The respondent further stated that a principle to ensure SEP valuations bear

110 <https://2020.standict.eu/sites/default/files/CWA95000.pdf>

111 CWA 17431 “Principles and guidance for licensing Standard Essential Patents in 5G and the Internet of Things (IoT)”.

112 Ibid.

a reasonable relationship to the economic value of the IPR should be adopted. The respondent also argued that principles should deal with royalty rates focusing on the smallest component that practices the SEP, not the end product, a right for licensees to challenge the essentiality, validity, and infringement of SEPs, and principles to ensure SEP holders do not refuse licences to component suppliers and other companies making devices that practice standardised technologies.

## Reflections on different licensing models

- 5.81 One respondent argued that the licensing model of Bluetooth, for example, is a highly efficient standard, widely accepted, and continues to innovate without conflicts. The respondent argued that the Bluetooth model in contrast to the model associated with ETSI standards, for example, is not associated with a large number of licensing disputes ending up in expensive global litigation.
- 5.82 Another respondent promoted the use of open standards, without the use of patents. Where this was not possible, alternative approaches should be considered to allow unhindered access to the SEPs such as an encumbrance on the SEP in regard to open source software or the inclusion of a SEP in a patent pool.

## Comments on the policy approach

- 5.83 One respondent emphasised getting the policy considerations right, aside from discussing specific proposals. They stated that although policy considerations may give rise to many different licensing solutions, such policy considerations should be supported by good evidence, especially where they may harm the value of SEPs or incentives to contribute to technology standards. The respondent also argued that improvements to the efficiency of SEP licensing should enable wide adoption of standardised technologies, and ensure an adequate return to SEP holders based on the market value of the patented technology to its users.

**Question 20.**

**Would better use and access to patent pools offer improved efficiency around SEPs licensing? Or would greater use/access create barriers for innovators if there were limitations introduced i.e., cross-licensing?**

**Summary of themes:**

Many respondents provided comments on the benefits that patent pools can bring to SEP licensing, or added observations on promoting their use or access, as well as commenting on cross-licensing. The different themes in the responses were:

- **Benefits of patent pools.** Various respondents stated that patent pools improve the efficiency of SEP licensing
- **Patent pools should not be mandated.** Many respondents said that patent pools should not be mandated, rather it should be a voluntary licensing option that complements bilateral licensing
- **Multiple patent pools and access to standards.** Some respondents suggested that the existence of multiple patent pools for the same standard may bring difficulties in SEP licensing
- **Patent pools and licensing practices.** Various respondents argued that certain licensing practises may cause problems in patent pools
- **Patent pools, governance, and transparency.** Some respondents suggested there could be greater transparency in relation to patent pools and its governance
- **Patent pools and anti-competitive conduct.** One respondent pointed to potential anti-competitive behaviour as an inherent risk to patent pools
- **Cross-licensing.** Three respondents commented on introducing a limitation such as cross-licensing

**Benefits of patent pools**

- 5.84 Many respondents stated that patent pools can improve the efficiency of SEP licensing by reducing associated licensing costs. One respondent said that if an increase in the efficiency of SEP licensing brings appropriate royalty rates for SEP holders, then this can help incentivise R&D and standard development. One respondent stated that patent pools can reduce delays in litigation. They added that patent pools can accelerate the adoption of technologies and the promotion competition in downstream markets, thereby making new technologies more accessible to consumers. One respondent added that patent pools related to MPEG video codecs are a good example of where patent pools work well. Another respondent gave the example of audio recording. Although, even in these well-defined areas, one implementer added that it takes years for pools to reach a critical mass of relevant patents and that this timeline would be exacerbated in more complex technology areas such as 5G.
- 5.85 Several respondents pointed toward the presence of essentiality checks for SEPs within patent pools as a benefit. However, one respondent stated that although most patent pools conduct essentiality checks for some or all patents offered to a pool, the assessments can be costly, and those costs need to be

considered. They added that, for larger pools, the higher cost may lead to only a sample of patents checked for essentiality. Several respondents said that patent pools can make the SEP ecosystem more transparent, particularly regarding publishing information related to licensing negotiations. Two respondents suggest that patent pools provide transparency of licensing rates and other terms as those details are sometimes made public on the patent pool's website. Some respondents stated that patent pools can reduce the effect of royalty stacking.<sup>113</sup>

- 5.86 Some respondents, from a variety of different stakeholder groups, suggested that patent pools are more effective in technology areas that are well-defined and specific as opposed to complex technology areas. One respondent stated that this is due to patent pools compensating their participants based on pure patent counts or a similar mechanism. This respondent added that such a model creates incentives for patent owners, who believe they own more valuable assets, to stay out of pools to prevent others from benefitting from their assets. Inferring that patent pools are more suitable where the contribution of individual patents to the value created by the technology is relatively even.

### Patent pools should not be mandated

- 5.87 Several respondents stated that licensing through patent pools should remain voluntary and only as an alternative to licensing through bilateral agreements. One respondent added that patent pools should not be mandatory as it may raise concerns regarding article 28 of the TRIPS Agreement<sup>114</sup>. Suggesting that mandatory licensing may affect rights conferred by the patent owner. Some respondents proposed that market forces and market participants should decide who joins and what terms and conditions are employed by patent pools. One respondent added that competition law requires the option of bilateral licences to be available.
- 5.88 One licensing administrator said that forcing SEP holders to participate in patent pools could result in licensing rates that are not as efficient as they would be in pools that are formed through voluntary participation. Another respondent stated that in their experience it is normal for a licensee to prefer negotiating bilaterally as it allows greater flexibility within the terms. They added that there are no notable examples of successful patent pools related to the licensing of smartphones as they are usually licensed through bilateral agreements.

### Multiple patent pools and access to standards

- 5.89 Some respondents stated that the existence of multiple patent pools covering the same standard can be problematic for negotiating SEP licences. One respondent added that this can undermine the efficiency and certainty that patent pools could bring to licensing negotiations. Further, one respondent added that this may lead to duplicative royalty demands that do not consider the aggregate royalty burden for a standard. As a result, this may act as a barrier to accessing a standard. Another respondent, a legal services provider, stated that for certain products that inherently incorporate several different standards, providers of these products may need to enter into multiple patent pools. One respondent offered a potential solution to limiting the number of patent pools for a standard, suggesting that it may be more helpful to license out a critical mass of SEPs relevant to a given standard. They added that a critical mass of SEPs may also generate a benchmark for reasonable licensing fees for other pools.

113 'Royalty stacking' is when firms charge inefficiently high prices for subsets of patents that cover complementary technologies.  
[https://www.wipo.int/export/sites/www/ip-competition/en/studies/patent\\_pools\\_report.pdf](https://www.wipo.int/export/sites/www/ip-competition/en/studies/patent_pools_report.pdf)

114 Article 28 TRIPS Agreement - [WTO | intellectual property \(TRIPS\) - agreement text - standards](#)

## Patent pools and licensing practises

- 5.90 In contrast to the benefits stated, several respondents said there were problems created by patent pool licensing terms and practises. One respondent, an implementer, stated that patent pools or licensing platforms that refuse to license higher in the value chain do not improve efficiency in the ecosystem. Rather to the contrary, it only encourages friction and litigation. Some respondents stated that patent pools may increase the total licensing costs for smaller SEP holders with relatively small portfolios. One respondent added that this is due to an increased admin cost which SEP holders hope would be offset by a higher uptake in licences. Some respondents said that patent pools can create an incentive to over-declare. They explained that if a pool's rate is set by the patent owners, there is an incentive to include non-essential patents in the pool and set the rate too high.
- 5.91 Some respondents including a SEP holder and a licensing administrator state that patent hold-out and the unwillingness of licensees to engage in licensing negotiations appear to be issues that patent pools have not tackled. Within these responses, reference was made to the *Continental v. Avanci* case, stating that despite the increased efficiency that patent pools bring, combined with the availability of price information, some implementers have not been willing to accept or negotiate FRAND terms with patent pools<sup>115</sup>. One respondent added that patent pools can sometimes be in a worse position than SEP owners if they do not have a right to bring proceedings to enforce the patents in the pool.
- 5.92 Some respondents said that patent pools represent a concentration of economic power and must be carefully controlled to avoid market distortion or monopoly behaviour. Some respondents, mostly implementers, stated that licensing within patent pools should be based on FRAND principles as required in bilateral licensing arrangements. One respondent, an implementer, suggested that aggregate rate setting during the standard setting process would eliminate most of the problems identified above. Another respondent, a legal services provider, suggested that the existence of patent pools may be a sign of some degree of market failure regarding low uptake of licences by implementers and/or other frictions in the wider licensing environment.

## Patent pools, governance, and transparency

- 5.93 One implementer stated that patent pool administrators should be independent, meaning that they do not own any patents in the pool, to avoid any conflict of interest. The same respondent added that there should be transparency on the level of fiscal ownership and asset ownership between SEP holders (in a patent pool) during pre-licensing discussions.
- 5.94 Some respondents stated that, in the interest of transparency, patent pools should publish all their licensing terms including royalty rates, claim charts and other terms and conditions. They state that usually patent pools demand to take a licence before disclosing such information.
- 5.95 One respondent added that both patent pool administrators (e.g., sub licensors or licensing agents) and SEP licensors should be transparent about any licences granted to suppliers or customers in the supply chain of a multicomponent product. The respondent added that the administrators should collaborate with potential pool licensees to assess which licences already exist with the licensee's direct or indirect suppliers and its customers. Following this assessment, the pool administrator should adjust the royalty rate accordingly to avoid 'double-dipping'. Further, one respondent stated that patent pools should be obliged to disclose licensing conditions that at least cover "most favourable royalty rate" clauses which in turn would prohibit patent pools from granting licenses that have different royalty rates to similarly situated licensees.

<sup>115</sup> Continental Automotive Systems, Inc. v. Avanci, LLC

## Patent pools and anti-competitive conduct

- 5.96 Respondents stated that there is risk of patent pools being exploited for anti-trust or anti-competitive conduct such as the fixing of prices or sharing of confidential information relating to licensees and SEPs. One respondent added that the greatest care should be taken to avoid this. However, specific examples of this were not provided in response to this question.
- 5.97 One respondent, a legal services provider, stated that patent pools are not popular among SEP holders due to disagreements on various subjects including mechanisms for royalty sharing and on the quality of SEP portfolios. However, they added that having essentiality checks could mitigate and incentivise patent pools.

## Cross-licensing

- 5.98 Respondents commented on cross-licensing, where two or more parties both agree to license their respective IP to one another. One respondent stated that cross-licensing should not be seen as problematic as it allows rights holders to use their patent portfolio in a defensive manner and balance out licensing demands.
- 5.99 Some respondents stated that introducing limitations to cross licensing may be complicated. One respondent added that a cross-licensing limitation may delay the taking of licences as there are different bargaining levels between different SEP holders. Therefore, they suggest that this type of negotiation is best left to bilateral discussions between parties. They continue to add that cross-licences can be dealt with efficiently by patent pools through 'pre-netting' or 'post-netting' to account for pre-existing licensed patents such as cross-licences. However, another respondent added that that cross-licensing, as opposed to greater use or access, would act as a barrier to new entrants who may have little to cross-license and, therefore, may result in reduced competition.

### Question 21.

**How are patent pools best created? To what extent should States, SDOs or other appropriate entities be involved (or excluded) from setting up patent pools?**

#### Summary of themes:

Many respondents, including licensing administrators and some SEP holders, provided comments. The different themes in the responses were:

- **The best way to create patent pools.** Various respondents gave recommendations on how patent pools are best created and commented on attributes that make patent pools successful
- **Role of States and SDOs in the creation of patent pools.** Several respondents said that mandatory creation of patent pools would be problematic, although some said that SDOs or States could have a partial role to play
- **Patent pools and the role of competition authorities and law.** Various respondents suggested that competition authorities have a role to play regarding patent pools

## The best way to create patent pools

- 5.100 Respondents stated that patent pools are created to respond to market needs. One respondent explained that in deciding whether or not to join a pool, a SEP holder usually considers its business model, the standardised technology involved, the distribution of the collected royalties and whether it already has a licensing program in place for such technology.
- 5.101 Several respondents stated that patent pools should be created and/or maintained by an independent company or organisation. Respondents, added that, in some cases, an independent company may itself take the lead in approaching patent holders to create a patent pool. Further, one respondent stated that having an independent company run the patent pool provides a single interface for prospective licensees, leading to advantages in respect of efficiency and confidentiality.
- 5.102 Some respondents stated that the setting up of patent pools is best left to licensing administrators. Respondents added that patent pools are not easy to create and require very specialised administration. One respondent added that patent pools require a fine balance between the commercial interests of the participants, and the ability to offer pool rates and licensing efficiencies which outweigh the alternative bilateral licensing for SEP owners and implementers alike. Further stating that this requires careful commercial judgment, negotiation, and a great deal of industry experience.
- 5.103 One licensing administrator responded to say that creating a successful patent pool is related to the skill of the licensing administrator in finding and bringing together the right mix of SEP holders. Further, that the success of the patent pool's business may be determined by its ability to attract implementers to take licences voluntarily, which in turn will depend in large part on the SEP coverage and quality of the pool's offering, in addition to the rates and other terms.
- 5.104 Some respondents have pointed toward the success of patent pools that have been established at an early stage and have included a large proportion of patents relevant for a standard. One respondent suggested pools such as the MPEG-LA pools in the audio-video area and the Avanci pool for licensing cellular patents to the automotive industry are good examples of this. Another respondent added that patent pools should be established before a standard has become mature and should announce licence rate and conditions at that stage.

## Role of States and SDOs in the creation of patent pools

- 5.105 Several respondents stated that mandatory creation of pools would be problematic. One respondent added that mandatory patent pools risk questions over its management, control, and its legality. Further stating that this model would require patent holders to license their patents, which would in effect become a compulsory licence. One respondent, an industry body, added that this would go against patent holder's rights and the fundamental principles of the patent system itself.
- 5.106 One respondent highlighted the political complications that may arise should a State be involved with the creation of a patent pool. They explained that there may be a risk that States favour a particular stakeholder group based on the stakeholder representation within their state and may produce policies to that effect. Another respondent said that if States create patent pools, it is likely that certain technologies may become nationalised to certain geographical areas which may discourage potential participants. Adding that the independence of patent pool formation helps to maintain the priorities of SDOs without distraction.

- 5.107 Several respondents stated that SDOs should not have a commercial role in the formation of patent pools. Respondents added that most SDOs promote neutrality and state that they must be far removed from any kind of commercial involvement. One respondent stated that, in their view, a patent pool is an entirely commercial arrangement and patent pools should not be subject to regulatory involvement provided they abide by competition law principles. Further, another respondent provided an example stating that ETSI's IPR Policy and Guide on IPRs make clear that commercial issues regarding IPRs are not to be discussed within ETSI. Adding that any potential promotion of patent pools' formation by SDOs would contradict their role. Two respondents commented further stating that the SDOs' primary purpose and interest is developing technical standards. Adding that competition law concerns would increase if SDOs were not only agreeing to set technical requirements between competitors, but also setting the commercial terms of access to the standard. On the same theme, a licensing administrator pointed toward the potential confusion that may occur if SDOs were involved in both standard setting and patent pool formation. Adding that SEP holders and implementers may see participation in a patent pool as mandatory which may act to deter participation.
- 5.108 However, many respondents suggested that States or SDOs could have a partial role regarding patent pools. Respondents stated that States or SDOs may support or encourage the creation of patent pools, but they should not be involved in the formation of the pool. Some respondents added that there may be a role for the State and/or SDOs in providing guidance regarding suitable terms and structure for a patent pool. One respondent explained that SDOs could help by providing clear guidance on what fair and reasonable rates are in relation to SEP licensing within patent pools. Another respondent, a legal services representative, states that SDOs may facilitate the voluntary creation of patent pools, for example, by allowing a certain number of licensee members to request the creation of a pool for a certain standard or by selecting a few patent pool management companies, who will work with SEP owners on the creation of the patent pool. Several respondents pointed toward DVB is an example of an SDO that supports the creation of patent pools. However, one respondent highlighted that though DVB is an SDO, it is important to note that it does not administer the patent pools itself.

## **Patent pools and the role of competition authorities and law**

- 5.109 Several respondents, from a variety of stakeholder groups, stated that competition authorities have a role in establishing competition frameworks to ensure patent pool competition law compliance and their pro-competitive effects. One respondent added that authorities can encourage patent pools by providing "safe harbour" comfort letters to provide assurance that the relevant pool will overall be beneficial to competition and therefore will not be the subject of competition authority enforcement action provided the pool operates as promised. Another respondent stated that competition authorities have a role in ensuring that patent pools abide by their members' FRAND commitments. They added that competition authorities should also promote relevant existing guidance in competition law as well as the enforcement of competition and contract law where patent pools fail to abide by the FRAND commitments of their members. Some respondents stated that the UK Government should look carefully at the behaviour of SEP licensor pools under UK competition laws and should study the SEP licensing ecosystem to track SEP licensor pool behaviours and their impact on competition.

**Question 22.**

**Are there alternative ways to address disputes on pricing mechanisms? For example, what point in the value chain provides an economic basis to calculate rates payable?**

**Question 23.**

**How could schemes where there are specific definitions of what costs are allowable (percentage limits etc.) best be utilised?**

**Summary of themes:**

Responses gave ideas on the best way to resolve disputes around pricing of SEP licences. Different views were given on how the FRAND commitment should be interpreted, and whether use of specific pricing schemes would offer improvement on methods currently used in courts. The main themes were:

- **‘License to all’ vs ‘access to all’.** Differing views were given on whether the FRAND commitment should be interpreted as requiring all entities in a value chain to be able to obtain a licence
- **Use of SEP pricing mechanisms.** Some argued use of specific pricing mechanisms could limit flexibility and that focus should remain on high-level principles, whilst others gave examples of pricing mechanisms they believed could improve licensing efficiency
- **Economic basis for calculating rates payable.** Some argued end product price is the appropriate basis for calculating rates payable, while others argued that the selling price of the smallest saleable component of a product that implements the SEP should be used
- **Examples of SEP pricing mechanisms.** Various examples of pricing mechanisms were discussed by respondents, including SSPPU, percentage limit schemes, fixed, per unit schemes and schemes defining costs allowable

**‘License to all’ vs ‘access to all’**

5.110 Some responded that it is industry practice to interpret the FRAND commitment as requiring SEP holders to make standardised technology accessible to all, and that this does not require licensing all members of the value chain. These respondents suggested it is more appropriate for SEP holders to choose a single point in the value chain to license their patents.

5.111 Some argued transaction costs are reduced by licensing at a single point in the value chain. One responded that due to the intricacy and interchangeability of components within a value chain, monitoring licensed and unlicensed products is only feasible at the end product level. Furthermore, the respondent stated that compliance to technical standards can only be confirmed at the end product level according to IPR policies of SDOs, and that the FRAND commitment therefore does not apply to components that could be used in non-standard compliant products.

- 5.112 Others responded that there cannot be a requirement to license to all due to issues of patent exhaustion. Responses explained that because a SEP holder's patent rights may be terminated ('exhausted') after a supplier sells a component covered by a SEP licence, the SEP holder cannot claim further royalties downstream. Respondents argued this prevents SEP holders from licensing to more than one supplier in the value chain. Patent exhaustion is discussed further in section 2 on competition and market functioning, and earlier in this section.
- 5.113 Others responded that not all entities in the value chain need to have a licence, due to granting of 'have-made' rights. These "permit a licensee to have an unlicensed third party make a licensed product for the licensee"<sup>116</sup>. A licensee therefore has the right not only to make but to 'have made' the technology covered by the SEP, by an unlicensed third party such as a component manufacturer. Responses argued that this means licensing at the end product level does not restrict component suppliers' freedom to operate, so long as their customers are licensed.
- 5.114 On the other hand, some responded that licences should not be limited to a specific level of the value chain, but rather SDO policies should ensure implementers at any level are entitled to obtain a FRAND license ('license to all'). Some responded that if licences continue to be refused to upstream component suppliers, this could damage their ability to innovate on top of a standard. One implementer responded that where component suppliers are not able to obtain a licence to the relevant standards they implement, they are unable to indemnify their customers for patent infringement. They responded that this makes their customers hesitant to purchase their components, disrupting the process of product innovation and potentially delaying the adoption of IoT. This is discussed further in section 2 on competition and market functioning.
- 5.115 One responded that eliminating or limiting SEP holders' obligation to licence their SEPs to all third parties would conflict with the legal situation in other jurisdictions, where this principle has been upheld in court rulings<sup>117</sup>. It explained that UK suppliers would be disadvantaged if their foreign competitors were able to obtain licences and they were not, potentially causing the UK to fall behind in the 5G, automotive and IoT sectors. Some responded that allowing wider access to SEP licences would help new entrants in the component manufacturing industry and reduce the risk of monopoly, benefiting competition. A multi-organisation response argued that this would aid the UK Government's plan to increase vendor diversity in the 5G marketplace.

## SEP pricing mechanisms

- 5.116 Some responded that a pre-prescribed basis for setting licensing rates should not be used, and that in disputes this should be left to court judgement. Some pointed to the method of benchmarking comparable licences to obtain a FRAND rate as the best approach, as is often used in court adjudications. Others responded that focus should remain on high-level principles to ensure efficient and good faith licensing of SEPs.
- 5.117 A wide range of stakeholders, including SEP holders and implementers, responded against introducing more specifically defined pricing methodologies. Responses stated that these could risk creating a one-size fits all solution that does not provide sufficient flexibility to account for future shifts in market, and could otherwise impede efficient licensing. One SEP holder responded that since SEP uses vary widely within a sector, assessment of a fair return should not make use of formalised methodologies or rules.

<sup>116</sup> Intel Corp. v. Broadcom Corp., 173 F. Supp. 2d 201, 228 (D. Del. 2001).

<sup>117</sup> In the case of Huawei v ZTE, the European Court of Justice ruled there should be "legitimate expectations" of third parties to obtain licences; C-170/13, EU:C:2015:477, Judgment 53 (16 July 2015). In Motorola's 2014 enforcement case, the European Commission stated that "all interested third parties" must be able to obtain a SEP license; Case AT.39985—Motorola—Enforcement of GPRS Standard Essential Patents (29 April 2014).

5.118 Others responded that where specific methods are used to calculate royalties, these should be transparent. A consultancy firm responded that definitions of how proposed royalties are calculated should be provided to all licensees, irrespective of the size of licensee. An industry body responded that this would improve ease of comparability exercises, and a legal services body responded that this would provide greater clarity and understanding regarding an acceptable level of royalties. Others evaluated specific examples of pricing mechanisms, discussed below.

### **Economic basis for calculating rates payable**

5.119 Some responded, including some SEP holders and other non-implementer stakeholders, that it is the norm in most industries to use end product price as the economic basis for calculating rates payable, and that this should continue to be followed. One referred to the case of *Conversant v Daimler*<sup>118</sup> as guidance on calculating FRAND royalties based on standard-enabled features of an end product. One academic responded that basing royalties on end product price minimises disputes, as sales revenue is an objective measure that is easy to confirm and difficult to manipulate. A SEP holder and implementer responded that using the end product as the basis for pricing a licence ensures valuations consider the contributions by standardised technology to the consumer experience of the product or service.

5.120 Most SEP holders and some other respondents argued against use of SSPPU to set royalty rates. According to this valuation method, the economic basis for calculating rates payable is the selling price of the smallest saleable component of a product that implements the SEP, such as the microchip in a cellular device. Some responded that this could result in below-FRAND royalties, and others provided examples of cases where the practice has been explicitly rejected in European and US courts<sup>119</sup>. One responded that it is a matter of indifference at which point in the value chain the royalty rate is determined, since firms can adjust the percentage royalty to reflect the technological contribution of the licensed SEP portfolio.

5.121 On the other hand, several implementers and some other respondents argued that SSPPU is the best method for calculating FRAND royalties. They responded that this ensures royalties reflect the value added by the SEP, and not the value of any further end product innovation by the implementer, for example related to product quality and brand. Where the end product is used as the base for calculating rates payable, some responses argued this acts as a tax on end product innovation and dampens incentives to invest in new markets. One implementer argued SSPPU is the most logical approach for wireless communication standards, where the standard is substantially implemented higher in the value chain with little further value added downstream.

<sup>118</sup> *Conversant v Daimler*, District Court of Munich I, 30 October 2020, Case-No. 21 O 11384/19.

<sup>119</sup> *HTC v Ericsson*, US District Court for the Eastern District of Texas Tyler Division, Memorandum of Findings dated 23 May 2019, Case-No 6:18-cv-00243-JRG; *Nokia v Daimler*, District Court of Mannheim, judgment dated 18 August 2020, Case-No. 2 O 34/19.

## Percentage limit schemes

- 5.122 Several responses argued against use of percentage limit schemes, which cap royalty payments to a percentage of some defined cost. A SEP holder pointed to a test by Next Generation Mobile Networks Alliance (NGMN) that found percentage limits negotiated by patent holders to be significantly above actual royalty rates later agreed by market participants, therefore having no effect. It also found that the process of collecting information from patent holders to inform percentage limits was difficult under competition law, and that the cost and time involved could impact the success of evolving markets negatively.
- 5.123 A licensing administrator responded that use of percentage limits raises the issue of selecting an appropriate base by which to multiply the percentage rate. It responded that this issue can be avoided by specifying royalty rates as fixed prices, not percentages.

## Fixed, per unit schemes

- 5.124 Some responded that offering a fixed royalty per unit is preferable to use of percentage limits, giving the example of Avanci licensing 4G technology at a rate of \$15 per car. A legal services firm responded that defining an overall royalty stack for a given standard combined with an allocation depending on the strength of each SEP owner's portfolio would provide clarity, transparency and predictability in terms of maximum rates for a given portfolio. An implementer responded that reasonable and transparent per unit royalties have been proven to spur widespread use of standards, though it did not provide further evidence or sources in support of this statement.
- 5.125 An industry body responded that SDOs could encourage SEP holders to charge fixed dollar amounts per end-user unit (e.g. \$1 per device). One implementer suggested the IPO consider the proposal of a rate setting board, that could assist in making a public determination regarding the marginal value a particular standard creates in a device.

## Schemes defining costs allowable

- 5.126 A SEP holder responded that in some industries it is common practice to place a 'cap' (upper limit) on royalties. It explained that this can avoid elements of a product unrelated to the standard being used as a basis for valuation. If there were no royalty cap, it exemplified that the manufacturer of a smartphone made of gold would pay far higher royalties for a 5G license based on product cost, whilst gaining no additional benefit from 5G connectivity compared to a regular smartphone. However, it explained that certain product features may derive more value from standards, such as camera-enabled smartphones benefiting from picture-sharing enabled by cellular standards. It argued that royalty caps, if used, should allow royalties to reflect this additional value. Another respondent argued against use of cost-based pricing altogether, on the grounds that the value of a SEP is not necessarily related to the cost of manufacturing a product.
- 5.127 Some responded that greater detail on what costs are allowable in SEP licensing would support SEP evaluation and comparability exercises by prospective licensees, increasing efficiency. A Chinese industry body suggested that economic experts, technical experts and key industry players should decide which costs should be used to calculate royalties, with review by courts.
- 5.128 Some responded to question 23 with consideration of costs incurred by the SEP holder. An implementer suggested that SEP holders should be compensated for the costs of developing technology, including patent costs and a portion of R&D expenditures, plus a reasonable profit on invested sum. A legal services respondent suggested that additional service charges above and beyond agreed royalty rates should be avoided.

## 6. SEP litigation

### Question 24.

In your view, what are the benefits or drawbacks of national courts setting global licensing rates?

### Question 25.

Is reliance on courts to determine on a case-by-case basis whether a licence is FRAND efficient?

### Question 26.

How should industry led approaches for specific areas of SEPs arbitration be explored further? Do you also have views on alternatives to industry led solutions, for example government providing alternative ways of determining and resolving FRAND licensing disputes?

### Question 27.

Are there already effective alternative means of arbitration and dispute resolution away from courts in respect of FRAND licensing?

### Summary of themes:

There were a mixture of views as to whether national courts should determine global FRAND licences. Respondents also generally reported that litigation is not efficient. There were also a mixture of views relating to the use of alternative dispute resolution mechanisms in SEP disputes.

- **National courts determining the terms of global FRAND licences.** Respondents reported various benefits and drawbacks of the determining of global licensing rates by national courts. There were a mixture of views as to whether national courts should determine the terms of global FRAND licences
- **Role of courts in SEP disputes.** Respondents reported that the use of courts in SEP disputes is generally inefficient but some said the right of access to court should be maintained
- **Alternative Dispute Resolution (ADR).** There were a mixture of views as to the advantages and disadvantages of existing ADR, and whether it is effective. There were a mixture of views as to whether existing ADR needed reform or new ADR mechanisms should be created

## Benefits of national courts determining the terms of global FRAND licences

- 6.1 In the UK, courts have been prepared to determine the terms of a global FRAND licence, as seen in the UK Supreme Court decision in the *Unwired Planet v Huawei*<sup>120</sup> case. Respondents raised a variety of benefits and drawbacks of national courts determining global licences.
- 6.2 A number of respondents said the setting of global licensing rates by national courts can be more efficient than pursuing litigation in multiple jurisdictions, with references made to efficiencies of time and/or cost. One of these respondents stated that litigating country by country is unrealistic and would enable an implementer to avoid paying FRAND royalties. Another of these respondents said that if parties agree to international arbitration, this could be a particularly efficient way of setting global rates. One respondent said it is more convenient to calculate rates for a global market. This respondent also suggested this helps both licensors and licensees check the licence rates and whether they are being paid. Some respondents commented that national court judgments provide a transparent approach that could be used as guidance by others in the setting of global FRAND rates. Some respondents suggested that the setting of global rates by national courts can provide certainty and finality to parties in licensing disputes.
- 6.3 Several respondents commented that global licensing decisions by national courts reflect, or would reflect, industry practice in these circumstances. Some of these respondents said SEP licensing is generally done on a global basis. One of these respondents said that global licences set by national courts are the only option if parties will not agree to enter into arbitration. Some respondents also generally supported the approach UK courts have taken in SEP disputes or with regards to global licensing. One respondent stated that the *Unwired Planet*<sup>121</sup> decision is likely to strengthen the attractiveness of the UK as a jurisdiction for SEP holders.
- 6.4 On the other hand, several respondents said national courts should not be able to compel a party to global licensing without their consent. However, some of these respondents said that global licences decided by national courts can have benefits and should be available when both parties consent. Some respondents were concerned about implementers being ‘forced’ to accept a global licence determined by a UK court as a result of non-UK patents or when the implementer’s links to the UK are ‘minor’. Some, however, stated that in the *Unwired Planet*<sup>122</sup> decision the court was not ‘forcing’ an implementer to agree to a global licence. The implementer had the choice of being subject to a UK limited injunction or taking the licence.

## Drawbacks of national courts determining the terms of global FRAND licences

- 6.5 The most stated drawbacks among respondents were that forum shopping and a ‘race to the court’ may result due to divergence in the approaches of different national courts and/or the perception of a national court being favourable to certain parties. Some of these respondents reported that this may result in uncertainty for implementers and in ASIs. Some respondents said that some national courts may change their procedures to attract litigants or may make decisions that favour certain parties.
- 6.6 A number of respondents made comments relating to court mandated global licences being, or potentially being, jurisdictional over-reach. Some of these respondents said these decisions impinge on the ability of national courts to govern the IPRs or licensing rates of their jurisdiction. Several respondents commented that such decisions result in national courts making judgements on foreign patents despite the foreign patents being outside the jurisdiction of those national courts. Some respondents stated national courts may lack the expertise or information relating to foreign patents and sales to make decisions on global licences.

<sup>120</sup> Ibid. No. 13, *Unwired Planet v Huawei*.

<sup>121</sup> Ibid.

<sup>122</sup> Ibid.

- 6.7 Some respondents said that these decisions undermine the ability of potential licensees to challenge patents of a different jurisdiction. A few respondents said these decisions would discourage legal challenges by implementers that would curtail exploitative practices and ultimately benefit customers. Some respondents also stated that global licensing decisions by national courts invert traditional legal burdens requiring SEP holders to establish infringement and defend challenges to their patents.
- 6.8 Some reported drawbacks of national courts setting global licensing rates related to the effect or influence these decisions may have on potential licensees. A number of respondents raised concerns about parties using the threat of litigation or an injunction to coerce a potential licensee into a global licence that is not FRAND or not needed, and that licensees may not have the resources to challenge. Some of these respondents specifically referred to SMEs. Some respondents commented that the decisions made by UK courts may influence the decision of an innovator to be present in the UK market and threaten innovation by UK businesses.
- 6.9 Some respondents said the approach taken by UK courts in the *Unwired Planet*<sup>123</sup> case was not warranted and called for government intervention or clarification with regards to the precedent set. Some respondents stated that international solutions were needed to address the alleged problems resulting from these decisions. One respondent stated that though the ceasing of national courts determining global FRAND rates may result in FRAND rates that vary between jurisdictions this is not necessarily undesirable. This respondent suggested that inconsistencies between FRAND rates in different countries may ultimately result in greater consistency in the overall global FRAND licensing market. One respondent, however, said preventing UK courts acting in this manner would damage the SEP ecosystem.

## Role of courts in SEP disputes

- 6.10 Several respondents said it is not efficient for courts to make determinations on whether a licence is FRAND on a case-by-case basis. Several respondents also said litigation is time consuming and costly. Some respondents stated that resources required for litigation may create problems for parties with limited resources, such as SMEs, or when dealing with large patent portfolios. One respondent commented that the cost of litigation is prohibitive to many companies and evaluation of FRAND rates should be available without litigation. Some respondents raised concerns about inconsistency between different national courts or forum shopping. One respondent said there may be significant periods where implementers are unlicensed due to the implementers delaying negotiations and compelling the SEP holder to litigation. The respondent stated this is not efficient for the SEP holder and gives an advantage to the implementer as the licence terms determined by the court are unlikely to fully compensate for the lost revenue during the unlicensed period. However, one respondent said litigation can be efficient if courts recognise that licensing is normally done on a portfolio basis.
- 6.11 Some of the respondents that stated resolution via courts is not efficient also said that, despite this, courts are the only or best way of resolving FRAND licence disputes unless parties agree otherwise. Several respondents also said the right of access to court should be maintained. A number of respondents referred to court decisions being of use due to their transparency. Some of these said court judgements provide guidance on details of FRAND licences and/or expectations of behaviour that can help future negotiations. Further, some respondents commented that courts are more transparent than ADR mechanisms. Some respondents said courts were best placed to deal with FRAND disputes, referring to courts being bound by precedent, being best equipped to deal with the complexity of these disputes, and having access to evidence. A number of respondents said courts are, or should be, used as a last resort in trying to agree a licence or that most licences are reached through negotiations.

<sup>123</sup> Ibid.

- 6.12 Some respondents stated that negotiated outcomes should be incentivised or that courts should not be so relied upon in an efficient FRAND environment. However, one respondent said courts are the only way to obtain compensation from a truly unwilling licensee. Some respondents said that the courts are the only, or most, effective way to resolve disputes in FRAND licensing if parties do not agree to ADR. A few respondents said courts should encourage parties to seek a common forum for resolving issues, such as arbitration.
- 6.13 Some respondents suggested third party provision of FRAND templates or information on court decisions would increase efficiency of negotiations. Another respondent suggested courts could be more efficient by deferring to resolutions found by other courts. One respondent said increasing the transparency of SEP licensing may reduce litigation. Another respondent called for clarification of the role of national courts, including that national courts should not make judgment over foreign SEPs or set global licences. This respondent said litigation across multiple national courts would allow a SEP holder to demonstrate the strength of its global portfolio and would facilitate global licensing negotiations without involving national courts determining global licence terms.

## Alternative Dispute Resolution

- 6.14 The call for views asked questions about alternative means of arbitration and dispute resolution away from the courts. In response to these questions a number of respondents made reference to arbitration, mediation and ADR. The summary here uses ADR as a generic term that refers to ways of resolving disputes without the use of litigation in court, and which includes arbitration and mediation. Where specific references have been made to arbitration or mediation this has been reflected in this summary.
- 6.15 A number of respondents stated existing means of ADR can be effective, but their effectiveness is dependent on both parties entering these means voluntarily. A few of these commented that arbitration is usually favoured by licensors, while licensees/implementers often do not agree to arbitration. However, some respondents who commented raised drawbacks of ADR or said ADR mechanisms are not effective. Some responses to this section pointed to the World Intellectual Property Organization (WIPO) and the International Court of Arbitration of the International Chamber of Commerce (ICC), amongst others, as providing existing ADR for FRAND licensing.
- 6.16 A number of respondents said ADR should not be mandatory, with some of these commenting that parties should not be labelled 'unwilling' if they do not want to participate in ADR. One respondent stated that potential licensees should not be forced to engage in arbitration to avoid the threat of an injunction. Several respondents also stated that the right of access to court is important and should be maintained.
- 6.17 One respondent said ADR should not be seen as preferable to litigation. Another respondent said SEP arbitration should not be encouraged. This respondent said that allowing for regular litigated or arbitrated outcomes would reduce incentives to contribute to standards development. However, one respondent said ADR mechanisms should be promoted as effective ways to resolve disputes, especially to SMEs. Another respondent said there is potential for greater voluntary use of ADR.
- 6.18 A number of responses also made reference to whether government intervention is needed in ADR. Most of these comments said the government should not intervene in dispute resolution or that solutions should be industry led. Some of these responses said government intervention may lead to forum shopping. Some respondents that stated the government should not intervene in dispute resolution said the government should provide the appropriate framework for FRAND licensing to occur or should encourage willing licensees and good faith negotiations to reduce the likelihood of disputes.

## Advantages and disadvantages of existing Alternative Dispute Resolution

- 6.19 A number of respondents cited various advantages of ADR. These included confidentiality, speed, and lower costs than the courts. Respondents also said they had the advantages of allowing parties to have input into the composition of arbitration panels, and ADR having rules that can be modified to suit specific circumstances/features of a dispute. Some respondents said there were advantages in arbitration not being subject to appeal, and arbitration decisions being enforceable almost worldwide under the New York Convention. Some respondents also commented that international ADR can be used for cross-jurisdictional decisions on international disputes, which would reduce forum shopping.
- 6.20 Many respondents, including some that stated existing ADR means can be effective, reported disadvantages of ADR. The most common disadvantage stated was that, in contrast to litigation, ADR is not transparent. Some respondents stated this results in a lack of precedent and benchmarks for future cases and does not contribute to the broader understanding of FRAND licensing. One respondent said this may also result in a lack of certainty of outcomes for the parties involved.
- 6.21 Respondents covered a number of other disadvantages. Some said arbitrators may lack the technical expertise required or the jurisdiction to decide certain matters, e.g. patent validity. Some respondents commented that arbitration is not necessarily cheaper or more efficient than litigation. Some also stated ADR means do not provide for discovery of prior licence agreements during disputes, allow public input, or may alter due process rights, e.g. the right to appeal or where burden of proof lies. A few respondents also commented that arbitration impinges on the ability of national jurisdictions to retain authority over the patent rights of their jurisdiction. One respondent said that whilst existing arbitration may be adequate to resolve disputes between individual parties it does not address industry-wide disagreements. Some responses said arbitration may not be suitable for SMEs due to the smaller value of the disputes, or SMEs being unfamiliar with the process.

## Proposals for Alternative Dispute Resolution

- 6.22 Some respondents stated that it is not clear that further means of ADR are needed due to those that already exist, but proposed ways to encourage the use of ADR. Two respondents commented that existing arbitration could be improved by having dedicated guidance for FRAND disputes. One respondent suggested current ADR means could be incentivised by ensuring no legal remedies are available to the courts that are not also available in ADR. This respondent suggested this could be achieved by preventing granting of injunctions in litigation except in rare circumstances. One respondent stated that SEP licensing policies should be issued that provide guidance on how parties should behave in negotiations to reduce SEP disputes. This respondent also suggested that the government could impose deadlines for negotiations which if passed parties would need to enter into mediation. One respondent said the availability of accelerated SEP proceedings in front of independent, well-regarded courts would encourage quicker, good faith negotiations and would discourage opportunistic behaviour. This respondent also stated ensuring courts are cost and time effective is already a tool for resolving FRAND licensing disputes.
- 6.23 Several respondents suggested changes that could be made to existing ADR mechanisms. These included making arbitration methods and decisions public, making arbitration decisions appealable, and allowing parties to look at previously agreed SEP licences during ADR procedures, as occurs in court litigation. Some of these said early disclosure of other licences would help potential licensees check if licence offers are FRAND. Some respondents also commented that arbitration should offer appropriate due process rights to parties, and arbitrators should be impartial and have relevant expertise. One respondent also stated ADR mechanisms should not automatically assume SEP essentiality, validity, and infringement when proceeding with FRAND rate determination.
- 6.24 A number of responses included comments relating to the establishment of new ADR mechanisms. Some suggested international solutions were needed to promote consistency or address forum shopping. One of these respondents said such an international forum could be modelled on the copyright tribunals of the US and UK. One respondent suggested the government could moderate an initiative advised by SEPs experts and industry experts. A few respondents said independent tribunals could be established to deal with SEP disputes. One of these suggested a tribunal akin to an employment tribunal could be established that is lower in cost so that it is accessible to implementers.
- 6.25 Some respondents said SDOs could play a role in ADR. One of these respondents stated that arbitration within SDOs could help small companies and new entrants in the ICT sector. Some respondents suggested SDO membership could require arbitration or mediation prior to any litigation and could require arbitration decisions to be published. One of these respondents stated that dispute resolution could involve a mandatory mediation hearing exploring the likely outcomes if the matter were to go to full trial, as is procedure in the Family Court in divorce proceedings. This respondent also suggested that having an exchange of comparable licence agreements between the lawyers only would maintain desired confidentiality of licences. Another respondent said that any new industry-led approaches need to be more cost-effective and quicker than litigation and arbitration. This respondent also stated any new forums need to provide tools enabling determination of whole SEP portfolios.

## 7. Other comments

- 7.1 Respondents provided reference to a wide variety of papers, articles, surveys, and other evidence to support their responses to the questions within this Call for Views. Those references are reflected in Annex (B) of this document.

# Annex A – list of respondents and any further definitions

## Stakeholder Definitions

- **“Standard Development Organisation (SDO)”**. An organisation that is primarily engaged in activities such as developing, coordinating, promulgating, revising, amending, reissuing, interpreting and otherwise maintaining standards (with input from industry and technical experts) to meet the needs of an industry or field. Also known as a “Standard Setting Organisation (SSO)”.
- **“SEP holder”**<sup>124</sup>. A company that holds one or more patents that have been declared essential to a standard, and that it thereby commits to license on FRAND (fair, reasonable, and non-discriminatory) terms. Also referred to as a “SEP owner”.
- **“Implementer”**<sup>125</sup>. A company that manufactures goods and/or services in compliance with an industry standard, by directly or indirectly using technology declared essential to a standard.
- **“Academia”**. A university or organisation engaged in research and analysis within the field of SEPs, often applying economic and/or social theory and contributing findings to academic journals or seminars.
- **“Industry body / trade association”**. A not-for-profit organisation founded and funded by businesses that operate in a specific industry, to represent their collective interests.
- **“Legal services”**. An organisation that provides legal advice pertaining to intellectual property (including enforcement or defence of IP infringement claims), and professional bodies related to IP law.
- **“Licensing administrator”**. An independent agent formed to lead the development, administration, and management of licensing programs for SEPs (including patent pools, joint licensing programs, and other forms of IP aggregations).

<sup>124</sup> Respondents have been referred to as SEP holders where their answers to the introductory questions of the Call for Views questionnaire suggest that this is their principal relevant activity. Some SEP holders may also manufacture goods and/or services in compliance with the definition of an implementer.

<sup>125</sup> Respondents have been referred to as implementers where their answers to the introductory questions of the Call for Views questionnaire suggest that this is their principal relevant activity. Some implementers may also hold and license SEPs.

## Respondents

4iP Council	Innovators Network
Access Advance	InterDigital
ACT - The App Association	IP Europe
AIPPI Japan	IP Federation
AIPPI UK	Mavenir
Alliance for Open Media	Microsoft
Apple	Multiple organisations <sup>126</sup>
Avanci	N&M Consultancy
BBC (British Broadcasting Corporation)	Nokia
Bird & Bird	OpenUK
BritishAmerican Business	OxFirst
BSI (British Standards Institution)	Panasonic
Bullitt Group	Patent Protection Association China
Chinese Society of Automotive Engineers	Philips
CIPA (Chartered Institute of Patent Attorneys)	Potter Clarkson
Cisco	Qualcomm
City University of London	Siemens
CLEPA	Sisvel
Continental	Sky
Cubicubuc	Technical University of Munich
Dentons	University of Stirling
Dolby	University of Utah
EDMI	VDA
EIP	Vestel
Ericsson	Vodafone
Fraunhofer IIS	WiseHarbor
FSA (Fair Standards Alliance)	
George Mason University	
GSMA (Vodafone, Deutsche Telekom and Three UK)	
Hewlett Packard	

<sup>126</sup> Includes: ACT The App Association; Airties; Association des Constructeurs Européens d'Automobiles (ACEA); Computer & Communications Industry Association (CCIA); Cisco; Continental Automotive GmbH; dTOOR Inc. & The Cyrclé Phone; Emporia Telecom GmbH & Co KG; Fairphone; Fair Standards Alliance; Honda Motor Co., Ltd.; Juniper Networks Inc.; Lenovo Inc.; Renault Group SA; Sagemcom SAS; Sequans Communications; Sierra Wireless; Sky Plc.; Telit Communications SPA; Tesla Motors Inc.; Thales SA; u-blox AG; and Xiaomi Mobile Software Co., Ltd.

# Annex B – Further Evidence

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