

英国知识产权局：标准必要专利与创新（征求意见）

12月7日，英国知识产权局发布了“标准必要专利与创新：征求意见”的通知和方案，就所关心的标准必要专利问题比较全面的给出的征询的27个问题。

这是在英国脱欧之后，在知识产权政策方面非常重要的一个信号，显示出英国不仅想在SEP的司法上继续扮演全球裁判员的角色，甚至未来从治理上也要发挥更大的作用，因此应当及时关注其动向。

政府就围绕SEP的标准基本专利（SEP）生态系统（即授权参与者、商业关系、基础设施以及法律和监管环境）是否高效运行以及是否为所有相关实体实现适当平衡征求意见。目的是帮助评估是否需要政府干预。

我们的目标是为英国制定最佳的知识产权框架，在支持政府在创新战略和多元化战略中提出的雄心壮志的同时，促进现在和未来的创新和创造力。

背景

这项关于SEP的意见征集构成了英国创新战略的一部分：通过创新引领未来。创新战略制定了政府实现创新驱动增长的长期计划。其主要目标是促进整个英国的私营部门投资。这将确保所有企业都有适当的条件进行创新，并给他们这样做的信心，知识产权（IP）是实现其雄心壮志的关键。知识产权给了研究人员、发明家和创造者开发新

事物的信心。它帮助创新者获得投资回报，促进研究和创新投资。知识产权对英国经济至关重要：2017 年至 2018 年间，无形资产投资增长了 3.3%，估计达到 1692 亿英镑。这超过了 2018 年有形投资总额，该总额下降 3.9%，至 1510 亿英镑。知识产权的使用与企业绩效的提高有关，知识产权所有权（IPR）与企业层面的经济绩效改善密切相关 [脚注 1]。

英国从实力地位开始，在世界知识产权组织的全球创新指数 2021（脚注 2）和美国商会全球创新政策中心（GIPC）国际知识产权指数 2021 中排名第四。[脚注 3] 我们的知识产权制度在全世界都受到高度重视。

然而，英国知识产权体系跟上技术变革的能力是其持续高绩效的核心。数字行业在英国经济中扮演着重要角色，2019 年贡献了 1506 亿英镑，占英国总增加值的 7.6%，比 2018 年增长了 6.1%。[脚注 4]

我们已经看到无线技术（3G、4G 和 5G）在电信和汽车行业（例如，在导航系统）的广泛应用。反过来，围绕专利许可和标准使用的问题也越来越受到重视。

技术标准和 SEP 在技术部门的作用

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其雄心壮志的关键。知识产权给了研究人员、发明家和创造者开发新事物的信心。

技术标准是对想法、产品、服务或做事方式的约定或既定技术描述，您需要与他人分享理解。这些标准通常由标准开发组织（SDO）制定，其目的是创建标准，并由行业和技术专家提供投入。贸易机构、政府组织和类似实体也可以制定技术标准。

随着商业的日益全球化、新技术的出现以及互操作性的需要，标准的重要性日益增强。越来越多地依赖技术标准，使用户能够发送、接收和存储越来越多的数据，并有效地在线访问、流式传输或存储内容，例如 MPEG 音乐文件。在新市场，我们看到了对数字、物联网（IoT）和人工智能的需求，不同制造商的产品需要能够无缝地相互“对话”，为消费者提供价值。

标准和专利可以跨越多个学科和部门。在某些情况下，标准要求使用受专利保护的特定技术。保护对实施标准至关重要的技术的专利称为标准基本专利（SEP）。如果不使用这些 SEP 保护的方法或设备，制造商（或标准的“实施者”）很难创建符合标准的产品，如智能手机或平板电脑。

通常，SDO 将制定知识产权政策，确保 SEP 持有人在其 SEP 被宣布为本标准的基本要素后，按照公平、合理和非歧视（FRAND）条款向 SEP 实施者提供许可。这确保了标准的实施者可以轻松地使用技术标准。

从 20 世纪 90 年代初到 2014 年，已申报的 SEP 数量平均每五年翻一番。[脚注 5]截至 2020 年，已申报的 5G 标准所需专利约为 95000 项。[脚注 6]物联网 (IoT) 行业也越来越重要，2019 年底有 76 亿台活跃的 IoT 设备，预计未来 10 年将大幅增长的数字。[脚注 7]

电信领域的多样化

2020 年 11 月，政府的电信多元化战略提出了一些建议，鼓励新的供应商进入市场，包括淘汰传统网络，鼓励新技术和资金研发。它还委托了 2021 年 4 月提交的多样化工作组。工作组指出，SEP 有可能成为多元化的巨大障碍，并建议政府采取行动。

解决工作组提出的问题将是实现电信供应链有效和可持续多样化的核心，从而带来更大的竞争和创新。增加专利组合的透明度和获得专利组合的机会可能会改善市场的运作方式。多元化战略寻求证据，以更好地了解提高透明度如何改善市场运作，以及是否存在需要解决的低效问题。这一证据要求将补充作为多样化战略一部分正在进行的工作。

国际背景

英国认识到需要确保其国内立法和政策框架与 SEPs 许可的全球发展和挑战保持同步。现在，英国已经脱离欧盟，我们有机会行使我们新的独立地位为我们提供的灵活性，以确保 SEPs 环境能够更有效地发挥作用，为英国创新带来最大利益。

有效的全球运作生态系统是支持创新业务和技术的关键。克服 SEPs 框架目前面临的挑战可能需要全球合作，以反映业务是全球化的事实。美国和欧盟目前正在考虑与 SEPs 生态系统相关的政策。英国将考虑通过与国际伙伴的合作来最好地解决哪些问题。

这项征求意见的呼吁寻求国内外行业和其他方面的证据和评论。

如何响应这种对意见的呼吁

可在标准基本专利和创新：访问页面上获取回复表。请将回复发送至 SEPcallforviews@ipo.gov.uk。在回应本次征求意见的呼吁时，您可能会发现参考 IPO 的政策证据指南很有帮助。

截止日期

本次征询意见将持续 12 周。从[2021 年 12 月 7 日]开始，将于 [2022 年 3 月 1 日]23 时 45 分结束。

下一步

在征求意见结束后，政府将评估其收到的答复，并公布答复摘要。所获得的信息将为政府决定下一步可能需要采取的干预措施提供信息。任何影响评估和决策公告通常都会发布在 GOV.UK 上。

为咨询而处理的个人数据的隐私通知

有关知识产权局将如何根据《一般数据保护条例》（GDPR）处理您的数据的信息，请参阅首次公开募股的《个人数据处理隐私通知》，以便进行咨询。

标准必要专利、创新和竞争的关系

创新和创造力支撑着现代生活方式、企业和更广泛的社会。在当今不断变化的环境中，我们不仅将几年前无法想象的技术和服务视为理所当然，而且也开始期待和依赖不断产生的新思想和新产品。创新将伟大的思想转化为价值、繁荣、生产力和福祉。这是我们适应新机遇和新挑战的机制。

专利在创造一个鼓励和促进企业创新的生态系统方面发挥着重要作用。这一原则是奖励知识产权所有者的投资，同时保护与公共领域相关的自由，是整个专利制度工作的特点。

竞争对消费者起着重要作用，随着更多的公司进入市场，竞争促进了消费者的选择并降低了价格。竞争与创新之间的关系具有挑战性，因为创新可以促进竞争，反之亦然。然而，竞争可以促进创新，因为企业有动力开发新技术，以确保在市场中占据更大的地位。

使用 SEP 的行业往往涉及复杂的技术，如 ICT、电信和物联网。例如，欧洲电信标准协会（European Telecommunications Standards Institute）的 SEP 部门细分数字通信占 61%，电信占 29%，其他技术领域占 9%，其他部门占最后 1%。[脚注 8]

这些领域的创新具有互补性，这意味着可申请专利的创新可以相互结合使用。通常，单个产品会使用数百或数千个 SEP，这些 SEP 可能由不同的公司拥有。互操作性是这些产品的一个重要特征，即使由不同的制造商生产，系统和组件也可以相互通信。

这在汽车行业和物联网领域尤为重要。这种互操作性促进了竞争，允许多个制造商共同生产相同的产品，并改善了对消费者的服务。[脚注 9]

虽然专利在激励创新方面发挥着重要作用，但人们对 SEP 的获取、竞争问题以及对创新的影响提出了各种各样的关注。这些问题将在后面的章节中进行更详细的探讨。政府希望更好地了解 SEPs 生态系统的有效性或问题性，以及当前方法是否促进或阻碍创新。因此，政府就 SEPs 生态系统如何支持竞争和创新以及哪些干预措施可以帮助消费者等广泛问题征求意见。

1. SEPs 生态系统如何以平衡的方式有效工作，以支持竞争和创新？

2. 什么样的行动或干预措施能够为英国消费者带来最大的改善？

竞争和市场运作

SEPs 生态系统中竞争与创新之间的关系至关重要。我们的总体目标是确保利用 SEP 有效运作市场，并适当促进竞争和创新。本节旨在探讨 SEPs 生态系统如何运作，以及当前生态系统是否在其参与者之间达成了正确的平衡。

市场力量是 SEP 生态系统中的相关考虑因素。由于专利所提供的专有权，拥有专利可以创造一定程度的市场力量。如果专利被宣布为标准的基本要素，则可能存在市场力量的附加要素。任何市场力量在多大程度上引起 SEP 许可证持有人的担忧将取决于许可证费用的谈判方式以及如何根据 FRAND 条款提供许可证费用。

理论上，SEP 持有人对专利权利要求中规定的特定技术拥有合法垄断权，并且根据市场情况，有能力在不受竞争市场正常约束的情况下设定价格。这可以超越专利本身，因为 SEP 包含在标准中意味着潜在的许可证持有人别无选择，只能使用它。然而，人们认识到 FRAND 许可条款平衡了 SEP 持有人可能拥有的市场力量。

一旦制定了一个标准，并且 SEP 是其中的一部分，实施者可能很难切换到替代方案，这会进一步锁定他们。这种转换能力的缺乏可能是市场力量的来源

一些实施者可能会担心必须许可比他们的组件所需的更广泛的专利组合。这些实施者认为 SEP 持有人不能要求被许可人采取投资组合或捆绑专利许可。

SEP 可采用交叉许可协议和专利池[脚注 11]。竞争法框架（包括区块豁免和指南[脚注 12]）可能与 SEP 所有者之间协议中的条款相关。如果相互竞争的各方就定价或许可条款达成集体协议，这可能会产生竞争影响，因为这可能会消除竞争性市场压力。

3. 在您看来，在使用 SEP 的市场中是否存在市场力量方面的问题？特别是在给行业带来困难或阻碍创新者的实践中寻找例子。

4. 您是否知道 SEP 实施者需要购买与 SEP 相关的标准或组件无关的更广泛专利组合的许可证的情况的证据？有没有有效的方法来解决这些问题？

5. 竞争法框架在实践中是否影响 SEP 所有者之间协议的规定？如果是，它是如何做到这一点的？是否有改进的余地，以便更好地受益并鼓励竞争和创新？

6. 在您看来，可以采取哪些行动或步骤来鼓励 SEPs 生态系统中的竞争和创新？

系统的透明性

政府意识到对 SEPs 生态系统透明度的担忧，特别是对 SEPs 标准和定价至关重要的专利声明。对于哪些专利对标准至关重要，或者某些专利对标准是否至关重要，可能缺乏确定性。这可能会增加实施者的成本和复杂性。最近的一个案例表明，大量 SEP 被法院视为不必要，这可能意味着有时会出现过度申报的情况。[脚注 13]

许可证和 FRAND 定价谈判在私人领域进行，协议未公开。[脚注 14] 这种有限的透明度使得很难知道 FRAND 定价率是如何商定的，这可能会对其他谈判产生影响。尽管 FRAND 费率不一定对所有潜在许可证持有人都相等，但缺乏透明度可能导致谈判各方之间的信息不对称。

7. 关于专利如何被宣布为标准的基本要素，是否有足够的透明度？包括 SDO 在内的行业采取了哪些行动来确保理解重要性？

8. 您是否知道申报不足或申报过度的情况，以及这会给使用 SEP 的市场带来哪些问题？

9. 独立方引入必要性检查服务是否会改善许可证谈判？谁是进行必要性检查的适当独立方？

10. 应如何进行必要性检查？知识产权持有人的必要性检查和必要性声明是否应该具有一定程度的法律确定性？如果是，怎么做？

11. 由于 SEP 投资组合是与单个实施者协商的，您认为在进行协商时，定价是否具有足够的透明度？根据 FRAND，不同的 SEP 实施者出于相同目的使用 SEP，是否有理由对市场准入收取不同的费率？

12. 某种形式的定价透明度是否适合在 FRAND 定价谈判中支持实施者？

框架（专利、许可和诉讼）

本节特别涉及法律和监管框架与 SEPs 生态系统用户互动的方式。这包括专利框架以及如何使专利持有人和实施者能够利用对标准至关重要的专利。本节还考虑了许可的效率和 FRAND 诉讼的有效性。

专利侵权及救济

专利通过使企业能够保护其研发投入来激励创新，而标准允许不同公司开发的设备之间的互操作性。一些部门的标准经常提到受专利保护的技术。

专利权人有责任识别任何侵权情况并采取行动。[脚注 15]专利纠纷可以通过许可协议解决。专利持有人还可以通过法院强制执行其权利。

英国的专利纠纷可以集中于专利的有效性和侵权。如果受到质疑，例如作为对侵权索赔的抗辩，法院通常会首先寻求确定专利是否有效。

如果专利被认定有效，那么法院将确定某项行为是否侵权。如果一项行为被认定侵权，法院可采取两项行动：

(i) 命令被告停止侵权行为的禁令；

(ii) 判被告人损害赔偿，以补偿对申索人造成的经济损害。

(iii) 在 SEPs 的案例中，侵权问题因任何权利人需要根据 FRAND 条款进行许可而变得更加复杂。法院可能需要调查预期的许可证是否确实公平、合理和非歧视性。如果未发现许可证条款不符合 FRAND，则可将其视为侵权认定。

(iv) 依赖技术标准的产品通常需要涵盖多个 SEP 的许可证。在设立损害赔偿金时，法院通常会考虑单个 SEP 对相关产品的贡献。这可以通过几种方式实现。例如，参考产品的销售价格。专利申请具有地域性。它们仅适用于已申请和授予专利的国家或地区。SEP 在全球投资组合中持有，相关产品在多个市场销售。因此，在多个司法管辖区内，原则上可能需要对感知侵权提起诉讼。侵权造成的经济损害问题也可能成为一个全球性问题。在英国，法院已经准备好确定全球投资组合许可费率，正如我们从英国最高法院最近的判决（如 *Unwired Planet v 华为*）中看到的那样。[脚注 16] 专利持有人和技术实施者将采用商业策略或行为，这可能会影响依赖技术标准的实施者获得产品的机会或消费者最终为最终产品支付的成本。据说，这些商业策略包括被称为“坚持”或“坚持”的做法，下文将进一步详细阐述。

13.就专利制度在 SEP 和 FRAND 许可发展中所起的作用以及当前实践中是否存在为创新者带来问题（包括法律和法院判决）征求受访者的意见。如果可能，请包括案例研究或工作示例。

14. 由于专利具有地域性，当前的专利制度是否创造了一个公平的全球市场？SEP 许可费用是否因地区而异？

15. 是否对 SEP 侵权者采取了同等的法律行动和禁令行动，而不论其所在地区？

16. 当前的框架是否适用于您执行持有专利所赋予的权利？例如，禁令是一种有效的工具吗？实施者的反诉讼禁令有何影响？

SEP 许可

政府渴望了解是否有办法确保在促进竞争和创新以及提供获得专利保护的技术方面取得适当的平衡。正确的平衡可以确保 SEPs 生态系统有效并适合技术标准的未来发展。然而，有人担心，由于 SEPs 持有者和实施者在许可或使用 SEPs 的过程中采取的做法，SEPs 生态系统可能效率低下。

SEP 被纳入标准，前提是业主同意按照 FRAND 条款对其进行许可。FRAND 承诺的目标之一是防止所谓的“拖延”。当 SEP 持有人利用其地位收取更高的特许权使用费，而被许可人别无选择，只能支付时，就会发生扣押。[脚注 17]SEP 持有人对潜在被许可人具有强大的议价能力。如果潜在被许可人希望进入该标准所涵盖的市场，他们

通常别无选择，只能许可该专利。更高的版税[脚注 18]可能意味着更高的价格转嫁给消费者。

据说，当被许可人或潜在被许可人延迟获得 SEP 许可证的协议，以向 SEP 所有人施加压力，要求其发布侵权诉讼或提供更有利的许可条款时，就会发生“抵制”。

还有其他关于 SEP 许可实践的问题。例如，技术标准通常涉及许多补充标准的 SEP，这可能会导致版税累积问题。这种方法的一个问题是，特许权使用费叠加可能会增加许可成本，并使许可过程对被许可方来说效率低下。

还有关于定价基础的问题。SEP 持有者可能会根据专利贡献的最终产品（如手机或汽车）的价值来确定特定 SEP 的许可费率，从而寻求收入最大化，而实施者可能会争辩说，它应该适用于价值较低的“最小可销售专利实施单位”（如手机芯片）。因此，我们寻求证据来证明这些做法的效率，以及是否有任何潜在的机会来改善这些条件。

关于许可如何与知识产权、FRAND 和 SEP 相互作用的观点非常广泛。除了最小的可销售单元概念外，还有一些观点认为应将特许权使用费限制在某一特定成本的一定百分比内。虽然大家都知道这些概念被广泛使用，但人们认识到，这些许可证发放办法可能更好地纳入一个连贯的系统。一些人认为，专利池可以通过降低许可方面的交易成本，在提高 SEP 所有者和实施者之间的效率方面发挥作用。[脚注 19]

17. 在您看来，SEPs 和 FRAND 许可生态系统应如何适应新兴技术的新标准开发

18. 如果有，IP 框架中存在的灵活性可以提高实现者获得许可证的效率？

19. 您对 SEPs 许可范围内提高效率的其他方法有何看法？

20. 更好地使用和访问专利池是否会提高 SEPs 许可的效率？或者，如果引入了限制，即交叉许可，那么更多的使用/进入会给创新者造成障碍吗？

21. 如何最好地创建专利池？国家、SDO 或其他适当实体应在多大程度上参与（或排除）建立专利池？

22. 是否有其他方式解决定价机制争议？例如，价值链中的哪一点为计算应付费率提供了经济基础？

23. 对于哪些成本是允许的（百分比限制等）有具体定义的计划，如何才能最好地加以利用？

SEP 诉讼

根据美国数据，自 2000 年代中期以来，与 SEP 相关的诉讼数量急剧增加。我们还看到大量备受关注和广泛辩论的案例表明，已宣布的 SEP 对财务的影响越来越大。[脚注 21] 目的是更好地了解 SEPs 诉讼是否因 FRAND 谈判被延长以避免支付费用或诉讼的一般成本和效率低下而对专利所有者和实施者造成越来越多的问题。

行业和部门对设定全球许可的国家法院的作用产生了相当大的兴趣，包括 SEP 所有者和实施者对这些开发的支持和争议。政府认识到国家法院在解决许可证纠纷方面发挥的重要作用。然而，它也认识到，对于嵌入 SEP 的技术的用户来说，依靠法院解决此类纠纷可能效率低下且成本高昂。

英国民事诉讼程序规则[脚注 22]要求诉讼仅在考虑诉讼前协议后开始，其中包括考虑通过谈判解决争议或某种形式的替代争议解决方案，包括仲裁和调解。更广泛地使用仲裁或调解的一个潜在好处是可以降低成本，降低创新者的进入壁垒。政府就如何最好地鼓励和促进更多地使用仲裁以及政府是否应进行干预征求意见。政府认识到，需要仔细考虑有关各方当事人进行仲裁的任何要求，这些要求也可以与自愿方式一起考虑。

24. 在您看来，国家法院设定全球许可费率的利弊是什么？

25. 是否依赖法院逐案裁定许可证是否有效？

26. 应如何进一步探索 SEPs 仲裁特定领域的行业主导方法？您是否也对行业主导解决方案的替代方案有意见，例如政府提供确定和解决 FRAND 许可争议的替代方法？

27. 就 FRAND 许可证而言，是否已经有有效的替代仲裁和争议解决方法，可在法院之外进行？

其他问题

我们还欢迎你为政府在回应这一征求意见的呼吁时应该了解的任何其他意见或证据。

Standard Essential Patents and Innovation: Call for views

The government seeks views as to whether the Standard Essential Patents (SEPs) ecosystem (i.e. the enabling participants, commercial relationships, infrastructure, and legal and regulatory environment) surrounding SEPs is functioning efficiently and effectively and striking the right balance for all entities involved. The purpose is to help assess whether government intervention is required.

Our aim is to produce the optimal 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 and Diversification Strategy.

Background

This call for views on SEPs forms part of the [UK Innovation Strategy: leading the future by creating it](#). The Innovation Strategy sets out the government's long-term plan for delivering innovation-led growth. Its primary aim is to boost private sector investment across the whole of the UK. This will ensure the right conditions for all businesses to innovate and give them the confidence to do so, with intellectual property (IP) being key to delivering its ambitions. IP gives researchers, inventors and creators the confidence to develop something new. It helps innovators reap the rewards of their investments, promoting investment in research and innovation. 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 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^[footnote 1].

The UK starts from a position of strength, ranked 4th in the World Intellectual Property Organization's Global Innovation Index 2021^[footnote 2] and 2nd in the US Chamber of Commerce Global Innovation Policy Centre (GIPC) International IP Index 2021.^[footnote 3] 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 its 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.^[footnote 4]

We have seen the extensive rise in the use of wireless technologies (3G, 4G and 5G) in telecommunications and the automotive industry (for example, 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 technical description of an idea, product, service, or way of doing things where you need to share the understanding with others. These are usually produced by standards developing organisations (SDOs), 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 standards are increasingly relied upon to enable users to send, receive and store ever larger quantities of data, and efficiently access, stream or store content online e.g. MPEG music files. In new markets, we have seen the requirement for digital, the Internet of Things (IoT) and Artificial Intelligence, products from different manufacturers needing to be able to seamlessly ‘talk to’ each other to provide value to consumers.

Standards and 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 these SEPs, it is difficult for a manufacturer (or “implementer” of the standard) to create standard-compliant products, such as smartphones or tablets.

Typically, SDOs will have IPR policies in place that ensure SEP holders, once their SEPs are declared as essential to the standard, provide a license to implementers of the SEP on fair, reasonable and non-discriminatory (FRAND) terms. This ensures the technical standards can be readily used by implementers of the standard.

The number of declared SEPs doubled on average every five years between the early 1990s to 2014.^{[\[footnote 5\]](#)} As of 2020, around 95,000 patents had been declared essential for the 5G standard.^{[\[footnote 6\]](#)} The Internet of Things (IoT) sector is also of growing importance, with 7.6 billion active IoT devices at the end of 2019, a figure which is predicted to grow substantially over the next 10 years.^{[\[footnote 7\]](#)}

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 legacy networks, encouraging new technologies and funding R&D. It also commissioned the Diversification Taskforce which reported in April 2021. The [Taskforce](#) noted that SEPs have potential to serve as considerable barriers to diversification and recommended government takes action.

Resolving the issues set out by the Taskforce will be central in enabling effective and sustainable diversification of the telecoms supply chain - leading to greater competition and innovation. An increase in transparency of and access to patent portfolios may improve how the market is functioning. The Diversification Strategy seeks evidence to better understand how increased transparency can improve market functioning and whether there are inefficiencies that need to be tackled. This call for evidence will complement work under way as part of the Diversification Strategy.

International context

The UK recognises the need to ensure its own domestic legislative and policy frameworks keep pace with global developments and challenges for SEPs licensing. Now the UK has left the European Union we have the opportunity to exercise the flexibilities our new independent standing provides for us to ensure

the SEPs landscape can work more effectively to deliver the maximum benefit to UK innovation.

An effective globally functioning ecosystem is key to supporting innovative business and technologies. Overcoming the challenges that the SEPs framework currently encounters may require global collaboration to reflect the fact that business is global. The United States and European Union are currently considering policies relating to the SEPs ecosystem. The UK will consider which issues will be best served through collaboration with our international partners.

This call for views seeks evidence and commentary from industry and others both domestically and globally.

How to respond to this call for views

A response form is available on the Standard Essential Patents and Innovation: Call for views page. Please send responses to SEPCallforviews@ipo.gov.uk. In replying to this call for views you may find it helpful to refer to the [IPO's Guide to Evidence for Policy](#).

Closing date

This call for views will run for 12 weeks. It commences on [7 December 2021] and will close at 23.45 on [1 March 2022].

Next steps

After this call for views closes the government will assess the responses it has received and publish a summary of responses. The information obtained will inform the government's decision on any next steps on potential intervention that is required. Any impact assessments and policy decision announcements are generally published on GOV.UK.

Privacy notice for personal data processed for consultations

For information on how the IPO will process your data in accordance with General Data Protection Regulations (GDPR), please refer to IPO's [privacy notice for personal data processed for consultations](#).

Introductory questions:

Who are you?

In what capacity are you responding to this call for views?

Relationship between Standard Essential Patents, innovation and competition

Innovation and creativity underpin modern lifestyles, businesses and wider society. In today's constantly changing environment we not only take for granted technologies and services that could not be conceived of just a few years ago but have also come to expect and depend on the constant generation of new ideas and products. Innovation turns great ideas into value, prosperity, productivity and wellbeing. It is the mechanism by which we adapt to new opportunities and challenges.

Patents play an important role in creating an ecosystem that encourages and enables businesses to innovate. This principle of rewarding IP owners for their investment, whilst protecting the freedoms associated with the public domain, characterises the work of the patent system as a whole.

Competition plays an important role for consumers, promoting consumer choice and lowering prices as more firms enter the

market. The relationship between competition and innovation is challenging to measure empirically as innovation can promote competition and vice versa. However, competition can promote innovation as firms have an incentive to develop new technologies to secure a stronger position in the market.

Sectors making use of SEPs tend to involve complex technologies, such as ICT, telecommunications and the IoT. For example, the sector breakdown of SEPs at the European Telecommunications Standards Institute is 61% in digital communications and 29% in telecommunications, with another 9% in other technology areas and the final 1% in other sectors.[\[footnote 8\]](#)

Innovation in these sectors is characterised as complementary, meaning that patentable innovations are used in conjunction with one another. It is common that a single product will make use of hundreds or thousands of SEPs, which are likely to be owned by different firms. Interoperability is an important characteristic of these products, where the systems and components can communicate with each other even if produced by different manufacturers.

This is particularly important in the automotive sector and the IoT. Such interoperability promotes competition where it allows more than one manufacturer to make the same products work together and improves the offer to consumers.[\[footnote 9\]](#)

While patents play an important role in incentivising innovation, a variety of concerns have been raised about access to SEPs, competition issues and the impact on innovation. These concerns are explored in greater detail in later chapters. The government would like to better understand how effective or problematic the SEP ecosystem is and whether the current approach promotes or hinders innovation. The government therefore seeks views on the broad questions of how the SEPs ecosystem supports competition and innovation and what interventions could help consumers.

1. How does the SEPs ecosystem work effectively in a balanced way to support competition and innovation?
2. What actions or interventions would make the greatest improvements for consumers in the UK?

Competition and market functioning

The relationship between competition and innovation in the SEPs ecosystem is crucial. Our overall objective is to ensure there is an efficient functioning of markets using SEPs and the appropriate promotion of both competition and innovation. This particular section seeks views on how the SEPs ecosystem is functioning and whether the current ecosystem strikes the right balance between actors in it.

Market power is a relevant consideration in the SEP ecosystem. Owning a patent can create a degree of market power due to the exclusive rights it provides. If the patent is declared as essential to the standard, there may be an additional element of market power. The extent to which any market power causes concerns for SEP licensees will depend on the way in which licence fees are negotiated and how they are offered on FRAND terms.

In theory a SEP holder holds a legal monopoly over a particular technology set out in the patent claims and, depending upon the market, the ability to set prices without the normal constraints found in competitive markets. This can go beyond the patent itself as a SEP's inclusion in a standard means that potential licensees have no choice but to use it. However, it is recognised that FRAND

licensing terms afford a balance to the market power a SEP holder might have.

Once a standard is set and a SEP is part of it, it might be difficult for implementers to switch to alternatives, which can further lock them in. This lack of ability to switch can be a source of market power.^[footnote 10]

Some implementers may be concerned about having to license a wider patent portfolio than that needed for their component. Those implementers consider that SEP holders should not be able to demand that the licensee take a portfolio or bundled patent licence.

Cross-licencing agreements and patent pools^[footnote 11] may be employed in relation to SEPs. Competition law frameworks (including block exemptions and guidelines^[footnote 12]) may be relevant to the provisions included in agreements between SEP owners. Where parties who are in competition with one another reach collective agreement on pricing or licensing terms, this could have competition implications as this may remove competitive market pressures.

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.

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?

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?

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

Transparency in the system

Government is aware of concerns about transparency in the SEPs ecosystem, particularly concerning declaration of patents essential to the standard and pricing of SEPs.

There can be a lack of certainty as to which patents are essential to a standard, or whether certain patents are essential to the standard at all. This can raise costs and complexity for implementers. A recent case of a large number of SEPs being deemed non-essential by the courts, could suggest over-declaration is sometimes taking place.[\[footnote 13\]](#)

Licensing and FRAND pricing negotiations take place in the private sphere and agreements are not made public.[\[footnote 14\]](#) This limited transparency can make it difficult to know how FRAND pricing rates have been agreed which can have implications for other negotiations. Although a FRAND rate is not necessarily equal for all potential licensees, a lack of transparency can contribute to asymmetric information between negotiating parties.

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?

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

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?

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?

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?

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

Frameworks (patents, licensing, and litigation)

This section specifically relates to the way legal and regulatory frameworks interact with users of the SEPs ecosystem. This includes the patent framework and how this enables both patent holders and implementers to utilise patents that are essential to a standard. This section also includes consideration to the efficiency of licensing and the effectiveness of FRAND litigation.

Patent infringement and remedies

Patents provide incentives to innovate by enabling businesses to protect their investment in research and development, while standards allow interoperability between devices developed by different companies. Standards in some sectors frequently make reference to technologies that are protected by patents.

It is the responsibility of the patent owner to identify and take action against any instances of infringement. [footnote 15\]](#) Patent disputes can be resolved through licensing deals. Patents holders can also enforce their rights through the courts.

A patent dispute in the UK can focus on the validity of the patent and infringement. If challenged, for example as a defence against a claim of infringement, a court will typically seek to establish whether a patent is valid first. If the patent is found to be valid, then a court will establish whether an act is infringing. If an act is found to be infringing, the court has two actions available to it:

- (i) An injunction, ordering the defendant to desist from their infringing act;
- (ii) An award of damages against the defendant, to compensate for the economic harm caused to the claimant.

In the case of SEPs, the issue of infringement is further complicated by the need for any rightsholder to license on FRAND terms. A court may need to investigate whether a prospective licence was indeed fair, reasonable, and non-discriminatory. If the terms of a licence are not found to be FRAND, this may count against a finding of infringement.

Products which rely on technology standards might typically require licences covering numerous SEPs. In establishing an award of damages, courts might typically consider the contribution an individual SEP has to a relevant product. This might be done in several ways. For example, by reference to the sale price of the product.

Patents are territorial in application. They are only applicable in the country or region in which a patent has been filed and granted. SEPs are held in global portfolios, and relevant products are sold in multiple markets. Consequently, court action against a perceived infringement may in principle be needed in multiple jurisdictions. The question of economic harm due to infringement can also become a global one.

In the UK, courts have been prepared to establish global portfolio licensing rates, as we have seen through recent UK Supreme Court decisions such as *Unwired Planet v Huawei*.^[footnote 16]

Patent holders and technology implementers will employ commercial strategies or behaviours, which may impact on access to products by implementers who rely on the technology standards or the cost consumers ultimately pay for the end product. Those commercial strategies are said to include practices known as hold-out or hold-up, which are set out in further detail below.

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.

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

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

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?

Licensing of SEPs

The government is keen to understand whether there are ways to ensure the right balance can be struck to promote competition and innovation and provide access to technologies protected by patents. The right balance can ensure the SEPs ecosystem is

effective and fit for the future development of technical standards. However, there are concerns that the SEPs ecosystem can be inefficient as a result of practices that SEPs holders and implementers put in place during the course of licensing or using SEPs.

SEPs are incorporated into a standard on the condition that the owner agrees to license them on FRAND terms. One of the aims of the FRAND commitment is to prevent so called “hold-up”. A hold-up is said to occur when a SEP holder exploits their position to charge higher royalties that the licensee has no choice but to pay.^[footnote 17] The holder of the SEP has strong bargaining power with respect to potential licensees. Potential licensees usually have no alternative but to license the patent if they wish to enter the market covered by that standard. Higher royalties^[footnote 18] can mean higher prices are passed on to consumers.

It is said that a ‘hold-out’ occurs when a licensee or potential licensee delays the agreement to take a licence of a SEP(s) in order to put pressure on the SEP owner to either issue infringement proceedings or provide more favourable licensing terms.

There are other reported concerns about SEP licensing practices. For example, technical standards often involve numerous SEPs that are complementary to the standard, and this can cause issues of royalties stacking up. A concern with this approach is that royalty stacking can increase the cost of licensing and make the licensing process inefficient for licensees.

There are also questions about the basis of pricing. SEP holders may seek to maximise revenue by basing licensing rates for a given SEP on the value of the end product to which the patent contributes (such as a mobile phone or a car), whereas implementers may argue it should apply to the less valuable “smallest saleable patent practicing unit” (such as a chip in a mobile phone). Therefore, evidence is sought on how efficient these practices are, and whether there are any potential opportunities to improve these conditions.

Views on how licensing interacts with IPRs, FRAND and SEPs are quite wide ranging. As well as the smallest saleable unit concept there are views on limiting royalty payments to a percentage of some defined cost. Although it is understood that these concepts are widely used, there is recognition that these approaches to licensing could possibly be better incorporated and integrated into a coherent system.

Some see a role for patent pools in promoting efficiency between SEP owners and implementers by reducing transaction costs in respect of licensing.^{[footnote 19](#)}

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

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

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

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?

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?

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?

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

SEP Litigation

The amount of litigation relating to SEPs has increased dramatically since the mid-2000s according to US data. We have also seen a significant number of high profile and widely debated cases indicating a growing financial impact of declared SEPs.^{[footnote 21](#)}

The aim is to better understand whether SEPs litigation has become increasingly problematic for patent owners and implementers, as a consequence of FRAND negotiations being prolonged to avoid paying fees or the general cost and inefficiency of the litigation.

There has been considerable industry and sector interest on role of national courts setting global licensing, including support for and disputes against these developments by SEP owners and implementers. The government recognises the important role national courts play in resolving licensing disputes. However, it also recognises that reliance on courts to resolve such disputes can be inefficient and costly for users of technologies in which SEPs are embedded.

UK Civil Procedure Rules^{[footnote 22](#)} require litigation to only commence after pre-action protocols have been considered, which includes consideration of negotiation to settle a dispute or of some form of Alternative Dispute Resolution, including arbitration and mediation. A potential benefit of more widespread use of arbitration or mediation could be reduced costs and lower barriers to entry for innovators. The government seeks views on how best to encourage and promote greater use of arbitration and whether government should intervene. The government recognises that careful consideration would be needed in respect of any requirement on parties to enter into arbitration that could also be considered alongside voluntary approaches.

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

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

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?

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

Other questions:

We also welcome any other comment or evidence that you believe the government should be made aware of when responding to this call for views.