COMMISSION STAFF WORKING DOCUMENT

EXECUTIVE SUMMARY OF THE IMPACT ASSESSMENT REPORT

Accompanying the document


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Executive Summary Sheet

Impact assessment on proposal for a regulation to create a register for standard essential patents, a system to evaluate essentiality of patents, a FRAND dispute resolution mechanism and a process for ex-ante determination of aggregate royalty for a standard.

A. Need for action

Why? What is the problem being addressed?

Standard Essential Patents (SEPs) are patents that protect a technology necessary to fulfil an industry standard. Such standards are, for example, communication standards (e.g. 3G, 4G, 5G, WiFi, NFC), audio/video compression and decompression standards (MPEG, HEVC), as well as standardised technologies for data storage and exchange (CD and DVD), photo formats (JPEG), and Home Audio/Video Interoperability (HAVi). In practice many of the communication standards concern all connected devices including phones, smart TVs, connected cars, smart meters and mobile payment terminals; other standards are used in a wide variety of products as well. The applicability of SEPs covering all these standards (particularly for communication) is going to increase with the rise of the ‘Internet of Things’ (IoT), as well as with many initiatives aiming at green transition (e.g. energy conservation).

SEPs are “essential” in the sense that the patented invention must be used (implemented) in products to comply with a technical standard. As a result, the SEP owner wields a privileged market power over the implementer of standardised technology, as there is no alternative to using their SEPs. Although there may exist different standards for some functionalities (e.g., video), for certain, widely used, standards (in particular cellular connectivity like 4G, 5G) there is no alternative. To curtail or to prevent the abuse of this power, standard setting organisation in which companies are members and to which they declare their SEPs, require them to commit to license their SEPs on “Fair, Reasonable and Non-discriminatory” (FRAND) terms to implementers. Other than this general commitment there is no EU legislation that would specifically regulate SEP licensing.

During the preparation of this initiative, the Commission gathered a significant amount of evidence from stakeholders, including SMEs, which indicated that the SEP licensing process is not efficient and needs more transparency and structure. Issues related to SEP licensing are also regularly raised with competition authorities, including the European Commission’s Directorate General for Competition.

Some key issues of concern are high licensing transaction costs and uncertainty about the SEP royalty burden. Due to a lack of sufficient information, implementers cannot assess their SEP exposure far enough in advance to take into account the licensing costs when planning their product business. On the other hand, SEP owners complain about long and expensive negotiations, especially with large implementers. More specifically, the following drivers of these problems were identified: First, there is only limited information on who owns SEPs and it is not certain that all patents sought to be licensed are really necessary (essential) to implement a standard. Second, there is very little information on SEP license fees (FRAND royalty), so implementers with little or no expertise or resources find it impossible to assess the reasonableness of a SEP owner’s royalty demand. Finally, licensing disputes can be time and cost intensive. Therefore, the mere threat of an injunction (leading to a suspension of production of allegedly infringing products) and the probability of a long and costly court procedure can create an inculcible pressure on implementers, especially SMEs, to agree to a license at rates that may not be FRAND. For SEP owners, to seek a resolution in courts also consumes a significant amount of resources and particularly time, during which royalty
income is not received.

The licensing revenue market is significant. In 2015 it was estimated at around USD 18 billion worldwide for just cellular standards. Assuming that EU companies are paying a proportional share to the EU GDP, at least around EUR 3 billion of royalties are paid by EU implementers every year. There are around 261 active SEP licensors globally, with 31 located in the EU (key players are Nokia, Ericsson, Phillips and Siemens) which hold around 15% of worldwide SEPs. The number of potential implementers in the EU is estimated at 3,800.

**What is this initiative expected to achieve?**

This initiative aims at: (i) ensuring that end users, including small businesses and EU consumers benefit from products based on the latest standardised technologies at reasonable prices; (ii) making the EU an attractive place for innovation and standards development (including for global participants); and (iii) ensuring that both EU SEP owners and implementers innovate in the EU, make and sell products in the EU and are competitive in non-EU global markets.

To achieve this result, the initiative strives to facilitate SEP licensing negotiations and to lower transaction costs for both SEP owners and implementers by (i) providing more clarity on who owns SEPs and which SEPs are truly essential; (ii) providing more clarity on FRAND royalty and other terms and conditions; and (iii) facilitating SEP dispute resolution.

**What is the value added of action at the EU level?**

Action at EU level is expected to save costs for stakeholders, both SEP owners and implementers, and for Member States. For instance, there would be one SEP register, one essentiality check per patent family, one common methodology for such checks, and a streamlined and transparent conciliation process for FRAND determinations. SEP owners and implementers would not have to incur the same costs in each EU Member State which would be the case with national solutions, especially in a situation where most standards are regional or global.

**B. Solutions**

**What legislative and non-legislative policy options have been considered? Is there a preferred choice or not? Why?**

Policy options are built incrementally, each is adding new elements to the preceding one.

- **Option 0: No policy change.**

- **Option 1: Voluntary guidance.** It is going to establish non-binding guidance on SEP licensing. A competence centre on SEPs created within the EUIPO 1 would provide free advice to SMEs on licensing negotiations (including trainings) and monitor the SEPs market, conduct studies on SEP licensing and promote alternative dispute resolution.

- **Option 2: SEP register with essentiality checks.** SEP owners seeking to license their SEPs for royalty and to enforce them in the EU would have to register their patents in the SEP register. To control the quality of the register, essentiality checks would be conducted by an independent evaluator pursuant to a methodology to be determined by the Commission at EU level and a system administered by the EUIPO. Sub-options are to (i) check all registered patents or (ii) check a small number of patents pre-selected by SEP

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1 European Union Intellectual Property Office
owners/implementers and a random sample of patents registered by each SEP owner.

- **Option 3: SEP register with essentiality checks and conciliation procedure.** Before launching a litigation, parties to SEP licensing dispute would have to go through a mandatory conciliation process (with some exceptions). An independent conciliator would seek to help parties reach mutually acceptable licensing terms and conditions. At the end of the process the conciliator will issue a non-binding report with recommendations on the FRAND rate (with a confidential and a non-confidential part).

- **Option 4: Aggregate royalty for SEPs.** Processes for determining an aggregate royalty (i.e., the total maximum price) for using a standard before or shortly after its publication would be established. SEP owners would be expected to agree on such royalty (potentially with the help of an independent facilitator from the competence centre). Additionally, both implementers and SEP owners could request an expert opinion on the aggregate royalty, where all the interested parties would be able to present their views. Finally, an aggregate royalty could be determined during the conciliation. This aggregate royalty would not be binding and would be published in the SEP register.

- **Option 5: SEP clearing house.** Establishment of a one-stop-shop for implementers to acquire SEP licenses by depositing an aggregate royalty with the competence centre. SEP owners should inform the centre how to allocate the aggregate royalty among them, absent which they would not be able to collect their royalty payments. They should also sign license agreements with any implementer who would make a deposit. Any royalties not collected by SEP owners within a year from the deposit would be returned to the implementers.

In case of all options, the competence centre would charge fees for the costs of its activities as well as of activities by external experts involved (essentiality evaluators and conciliators).

**Who supports which option?**

The options have been designed after extensive analysis of existing literature, including the contribution of the SEP Expert Group and the industry during the Webinar series. They have been discussed with practitioners with relevant experience. Most of the options can be compared with proposals made by the SEP Expert Group which received significant support from its members. In addition, during the public consultation there was strong support for more public information on SEPs and FRAND royalty, including on aggregate royalty (especially coming from SEP implementers). Around 53% of the respondents found arbitration useful and around 35% found mediation useful. The respondents noted that those instruments are not sufficiently used, primarily because they are confidential. The shortcomings of the existing mechanisms have been addressed by the proposed conciliation (FRAND determination) process. SMEs in particular noted their lack of resources to negotiate with SEP owners, which indicates their support for all measures reducing their transaction costs.

**C. Impacts of the preferred option**

What are the benefits of the preferred option (if any, otherwise main ones)?

Option 4 is the preferred option. The option reduces information asymmetry between a SEP owner and an implementer by providing the latter with information who the relevant SEP owners are, how many SEPs they have registered in the register and what their essentiality rate is (derived from a representative random sample of all registered SEPs) and what the potential (or maximum) total cost of using a standardised technology (aggregate royalty) is. A pre-trial obligatory conciliation is likely to reduce SEP dispute settlement costs to about 1/8 as the
The conciliator will assist both parties in reaching an agreement. A competence centre will provide objective information, guidance and support to SMEs in relation to SEPs and SEP licensing. Benefits and costs are presented in the table below.

Table 1: Average approximated annual costs and benefits of the preferred option per affected party and localisation (EUR million).

<table>
<thead>
<tr>
<th></th>
<th>EU</th>
<th>non-EU</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SEP implementers</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Costs</td>
<td>-0.77</td>
<td>-0.77</td>
<td>-1.5</td>
</tr>
<tr>
<td>Benefits</td>
<td>12.89</td>
<td>13.03</td>
<td>25.9</td>
</tr>
<tr>
<td><strong>Net</strong></td>
<td>12.11</td>
<td>12.26*</td>
<td>24.4</td>
</tr>
<tr>
<td><strong>SEP holders</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Costs</td>
<td>-8.13</td>
<td>-46.04</td>
<td>-54.2</td>
</tr>
<tr>
<td>Benefits</td>
<td>3.79</td>
<td>21.50</td>
<td>25.3</td>
</tr>
<tr>
<td><strong>Net</strong></td>
<td>-4.33</td>
<td>-24.54</td>
<td>-28.9</td>
</tr>
<tr>
<td><strong>Subtotal (net effect for implementers and holders)</strong></td>
<td>7.8</td>
<td>-12.3</td>
<td>-4.5</td>
</tr>
<tr>
<td><strong>EPO/NPO benefit</strong></td>
<td>29.0</td>
<td>-12.3</td>
<td>-4.5</td>
</tr>
<tr>
<td><strong>Total net benefit</strong></td>
<td>36.8</td>
<td>-12.3</td>
<td>24.5</td>
</tr>
</tbody>
</table>

* concerns non-EU implementers with subsidiaries in the EU;
Note: numbers rounded which may affect totals

**What are the costs of the preferred option (if any, otherwise main ones)?**

The majority of the costs of the preferred option would be borne by SEP holders, largely from outside of the EU. These costs mainly consist of SEP registration fee and remuneration of the essentiality evaluators. Additionally, there are uncertain costs due to indirect effects of the option, which might induce patenting activity and thus increase the patent maintenance costs.

**How will businesses, SMEs and micro-enterprises be affected?**

There are relatively few SMEs among EU based SEP owners (in the single digits). SME SEP owners currently lack the resources to license their SEPs efficiently. The register would give visibility of and a positive assessment on their SEP portfolios, the aggregate royalty would help justify their royalty demands and the FRAND determination (conciliation) procedure would offer them an opportunity to seek licensing without entering into costly litigation (see explanation under step 3). SME SEP owners would also benefit from reduced fees.

Around 85% of the identified 3800 potential SEP implementers are SMEs. Innovative SMEs have already been creating multiple applications using standards such as cellular, Wi-Fi, and NFC. Therefore, the question of how to license those technologies is relevant for such SMEs. This initiative addresses important problems SMEs face during SEP negotiations or business planning, such as the size of SEP portfolios, aggregate royalty, and FRAND determination. Additionally, the initiative offers to SME implementers reduced fees for the use of the competence centre’s services and free advice on SEPs.

**Will there be significant impacts on national budgets and administrations?**

No. The envisaged system will be financed from fees collected by the EUIPO for registration, essentiality checks, access to its resources and conciliation.

**Will there be other significant impacts?**

There are no other significant impacts to be expected.

**D. Follow-up**

**When will the policy be reviewed?**

The first evaluation should be done five years after the entry into force of the regulation.