

ROADMAP			
TITLE OF THE INITIATIVE	Standard Essential Patents for a European digitalised economy		
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LIKELY TYPE OF INITIATIVE	Communication		
INDICATIVE PLANNING	2 <sup>nd</sup> quarter 2017		
ADDITIONAL INFORMATION	"-"		
<p><b>This Roadmap aims to inform stakeholders about the Commission's work in order to allow them to provide feedback and to participate effectively in future consultation activities. Stakeholders are in particular invited to provide views on the Commission's understanding of the problem and possible solutions and to make available any relevant information that they may have. The Roadmap is provided for information purposes only and its content may change. This Roadmap does not prejudge the final decision of the Commission on whether this initiative will be pursued or on its final content.</b></p>			

A. Context, Problem definition and Subsidiarity Check
<p><b>Context</b></p> <p>A Standard Essential Patent (SEP) is a patent that covers technology which is essential to use in order to comply with a technical standard (a standardised technology). SEPs have been at the heart of high-end and innovative products dependent on this type of standardised technology. Without access to these standardised technologies, innovative products would not be able to communicate with one another.</p> <p>With the development of 5G and the Internet of Things (IoT), a variety of EU industries are engaging in further digital integration of a constellation of objects, devices, sensors and everyday items. These applications are found in key domains: from connected cars to smart cities.</p> <p>The benefits of IoT to businesses, citizens and public authorities may however be delayed, due to regulatory uncertainty as regards the delineation, licensing and enforcement of SEPs. Access to the protected technology attached to these standards remains unpredictable, notably for industries outside the ICT sector (due to factors such as opaque information, unclear valuation of the patented technologies, and risk of uncertainty in enforcement). This uncertainty is undermining the roll out of business plans for both patent holders and implementers of these connectivity technologies. In addition, standardisation of 5G and IoT is being carried out mostly on a global basis, and non-EU countries are developing different policies with respect to SEPs, which may further delay the development of IoT both in Europe and in those non-EU countries. Lack of an EU response could thus leave the EU behind its main competitors. To promote the roll out of 5G and IoT, the licensing and enforcement of patents essential to ICT standards need both to be balanced, predictable and to facilitate access to the technology while preserving its fair value.</p> <p>The EU's competitiveness depends on its ability to generate and implement digital innovations across sectors. This requires interoperable solutions based on open standards that are accessible to all implementers. Patent-based standardisation is a key contributor to industrial innovation and competitiveness, and is the basis for an efficient and sustainable ICT standardisation system. A balanced, more predictable framework for SEPs will help boost competitiveness and help to achieve the goals of the Digital Single Market (DSM). It will contribute to the strategic goal of fully deploying 5G across the EU by 2025, as stressed by President Juncker in the State of the Union speech in September 2016.</p> <p>The DSM stressed that efficient licensing of SEPs is necessary to give to innovators - the patent holders - an adequate return on their investment. Likewise, implementers - the users of SEPs - must have a predictable and proportionate framework to use the standardised technologies at a fair and reasonable cost.</p> <p>In its Communication of 19 April 2016, <i>Digitising European Industry</i> (COM(2016)180), the Commission stated that 'ICT standardisation needs to rely on a balanced IPR policy for access to SEPs', and referred to "policy measures outlined in the parallel Communication on ICT standardisation priorities for the Digital Single Market"<sup>1</sup>. The present initiative is a direct follow-up to these Communications.</p>

<sup>1</sup> In this Communication (COM(2016)176 of 19.4.2016), the Commission announced that it would 'work in collaboration with stakeholders including ESOs, EPO, industry and research, on the identification, by 2017, of possible measures to (i) improve accessibility and reliability of information on patent scope, including measures to increase the transparency and quality of standard essential patent declarations as well

In its Resolution of 26 May 2016 on the Single Market Strategy, the European Parliament emphasised the importance of SEPs and the importance of patents licensing agreements based on FRAND.

The Council conclusions on the Digital industry package of 17 May 2016 also recognised the need for a balanced approach for SEPs.

The Committee of the Regions and the European Economic and Social Committee have also stressed the importance of a balanced approach in their respective opinions on the Communication on ICT standardisation priorities.

### **Problem the initiative aims to tackle**

Given the global advent of the IoT, EU industries face significant risks in losing out in this new opportunity for standards development, implementation, innovation and growth.

The ability of IoT devices and systems to work together is crucial to maximise the full economic benefit of IoT applications. Without interoperability, 40% of the potential benefits on offer will not be reaped (McKinsey, 2015). Not having interoperable open platforms based on standards may result in vertical solutions based on proprietary technologies, which can lead to lock-in situations.

The initiative will address three main problems:

#### **1) Opaque information about SEP exposure:**

A high and ever increasing number of patents and patent applications are being declared as essential in ICT standardisation, but in contrast there are no effective, efficient and reliable tools for potential licensees to identify and verify the relevant and pertinent patents from which they need to take licenses for implementing the relevant standardised technologies in a concrete product.

#### **2) Unclear valuation of the patented technologies**

Businesses, especially outside the ICT sector, have difficulties assessing the value of the connectivity technology offered by the standard. There are no widely accepted valuation methodologies – and therefore no predictability of licensing fees or of the number of potential right holders who may assert their rights and the resulting cumulated licensing burden. At the same time, patent holders face unwilling licensees and significant challenges to value the use of their technology as well as their contribution to the elaboration of standards.

#### **3) Risks of uncertainty in enforcement**

The 2015 judgment by the CJEU in Huawei v ZTE provides a general framework for licensors and licensees to follow for the enforcement of SEPs and the use of injunctions. This judgement contributed to clarify the process to approach licensing negotiations for both parties. However, the Court was not in a position to give more precise views or guidance on more technical questions that are nevertheless highly relevant in practice, such as the required level of technical specifications to sustain the essentiality claim or the timing and basis for a FRAND counteroffer. Due the setup of the specific case in front of the Court, it also did not have an opportunity to express itself on issues such as how to deal with portfolio licensing and related damages claims, or the impact of alternative dispute resolution mechanisms, points which are very relevant and debated in SEP licensing markets. As the framework therefore is still very incomplete, with many uncertainties and open questions, further referrals to the Court are to be expected, of which the outcomes cannot, by definition, be known in advance. Taken as a whole, this context of enforcement uncertainty on the one hand leaves room for aggressive licensing practices, which exploit and thrive in such a situation of legal uncertainty. High litigation costs and long procedures involving several judicial instances have the potential of deterring IoT businesses from entering the SEP space. On the other hand, uncertainty in the enforcement framework also undermines the capacity of SEP holders to exert their IP rights due to delaying tactics by the potential infringer of the patent.

### **Subsidiarity check**

The issue is global, as the relevant connectivity standards are of a global reach and so are the related patenting strategies, and therefore the framework of SEP licensing should be framed at least at European level in order to ensure a level playing field in the EU. The EU seeks to ensure that EU standardisation remains at the forefront of international technology standardisation. This is an important element for the success of the DSM and the goal to deploy 5G across the EU by 2025.

This would provide a level playing field in the single market for technology providers incentivising their investment in R&I and standardisation, to businesses preparing 5G deployment, and those using connectivity

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as (ii) to clarify core elements of an equitable, effective and enforceable licensing methodology around FRAND principles and (iii) to facilitate the efficient and balanced settlement of disputes.'

applications for smart and connected products and services (IoT). In addition, this approach would also take into account international developments and thereby serve as a powerful vehicle to promote a European approach on SEPs in the context of the race to develop 5G.

In developing appropriate solutions there will be a role for the European Telecommunications Standards Institute (ETSI) or the European Patent Organisation (EPO), where EU cooperation is already ongoing. Uncoordinated SEP policy by Member States would weaken EU leadership in ICT standardisation, given the global character of related standards. Within Standard Setting Organisations (SSO), conflicting interests make it difficult for SSOs to deal with these complex legal and IP policy issues. Discussions over recent years confirm that there is little prospect of progress. Industry initiatives and discussions in SSOs are fragmented and do not allow for a holistic perspective on the entire SEP licensing environment, with trade-offs between its different elements..

A lack of harmonisation in SEP licensing would encourage forum shopping and put at risk the level playing field for the DSM, notably for SMEs.

## **B. What does the initiative aim to achieve and how**

This initiative will contribute to the digitisation of European economy and the completion of the DSM, as it should help ensure the smooth development of new technologies like 5G and the rapid roll-out of IoT.

The initiative should provide a framework that attracts and enables investments in research and innovation, standardisation, connectivity and ensures that businesses, public authorities and consumers can fully benefit from the potential of the IoT. The objective is a smooth, practicable and fair market system for SEP licenses. It should provide a framework to ensure access to interconnectivity and interoperability solutions offered by new standards at a fair and reasonable cost to the benefit of both patent holders and implementers. A balanced EU policy on SEPs would also contribute to consolidate the central role that European Standardisation Organisations and European innovators and implementers are playing in the development of standards for 5G and IoT. It could equally offer a model for other countries and standardisation organisations, and help EU efforts to respond to the development by non-EU countries of new approaches on SEPs.

In particular, the initiative would offer:

- (i) best practice recommendations to increase transparency on SEP exposure, including to SSOs to improve value and accessibility of SEPs databases and to bring more precision and rigour into the essentiality declaration system in particular for critical standards;
- (ii) guidance on the boundaries of FRAND and core valuation principles; and
- (iii) guidance complementing existing jurisprudence on enforcement in areas such as mutual obligations in licensing negotiations before recourse to injunctive relief, portfolio licensing and the role of alternative dispute resolution mechanisms.

At this stage, a Commission Communication seems to be the most appropriate format for this initiative. An approach encompassing all these elements, as announced in the ICT Communication, is the most efficient manner to secure a coherent, horizontal and effective impact on the licensing environment. This would provide a level playing field to businesses preparing 5G and those using connectivity applications to grow the opportunities of the IoT.

## **C. Better regulation**

### **Consultation strategy**

Both targeted and open stakeholder consultation activities have been/are carried out to underpin this initiative.

Numerous contacts with stakeholders from the technology provider's side, as well as from IoT sectors, have confirmed the scale of the above problems.

Regular participation over the past years in IPR committees of SSOs at EU and international level have also provided insights into the issue of declarations of essential patents in the standardisation process.

Participation in a number of conferences and workshops and contacts with academics are providing expert information in respect of the key issues at stake in patent licensing.

Two dedicated meetings with Member States in 2015 and 2016 allowed for initial exchanges of views on the links between patents and standards, and a first discussion on the potential impact for the IoT. The topic was again presented and discussed in a meeting with Member State experts on 3 April.

On 25 January the Commission held a workshop on Standard Essential Patents and how to facilitate the licensing agreements in the IoT area. It gathered over 100 attendees and 30 participants via streaming, representing major multinational companies, including new players in the IoT arena as well as SMEs representatives from different sectors

Late 2014 - early 2015, an online public consultation was held on SEPs which provided valuable insights into

problems and possible solutions. Over 100 responses were received from stakeholders.

The SEP enforcement problem has also been raised by a number of respondents (both public and private) to the 2016 open public consultation on the review of the IPR Enforcement Directive (Directive 2004/48/EC). Several asked to clarify the enforcement issues through a revision of this Directive.

The open public consultation on the ICT Standardisation Priorities of September-December 2015 confirmed a similar degree of concern among stakeholders.

Further stakeholder consultations are also planned, in particular through sector specific workshops and bilateral meetings and with a focus on issues related to FRAND determination and how to ensure the necessary balance of the SEPs licensing system, based on any issues brought forward by stakeholders.

#### **Impact assessment**

This policy Communication will mainly provide best practice guidance to industry, SSOs and Member States without changing legal positions or rights and obligations. Therefore the need for an impact assessment may only arise at a later stage, when after taking stock of developments, more targeted and stringent actions would be required.

#### **Evaluations and fitness checks**

The Commission published a study on 'Patents and Standards' in 2014 (<http://ec.europa.eu/DocsRoom/documents/4843/attachments/1/translations>), which gathered the views of numerous experts and reported on the challenges faced by five different sectors.

A recent study from CRA on SEP policy was another opportunity to engage with experts and stakeholders on possible solutions. This study confirmed the need and potential for improvement of the current system. The study promotes a holistic approach and suggests solutions on the three problems mentioned above.

The Commission published a study on SEP landscaping in December 2016 ([http://ec.europa.eu/growth/tools-databases/newsroom/cf/itemdetail.cfm?item\\_id=8981](http://ec.europa.eu/growth/tools-databases/newsroom/cf/itemdetail.cfm?item_id=8981)). Two further studies were published end 2016 by the JRC, on non-practicing entities and on FRAND litigation,