



INDUSTRIAL STRATEGY: INTELLECTUAL PROPERTY CALL FOR VIEWS

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Ericsson appreciates the opportunity to respond to the IPO's consultation on intellectual property in the context of 'Building our Industrial Strategy'.

We agree that IP is a key driver of innovation, enabling investment in R&D, collaboration between innovators and commercialisation of technology. We also agree that the UK's IP regime is strong, balanced and as a whole fit for purpose.

We would encourage the IPO to engage proactively with other parts of government to ensure that the importance of intellectual property and its role in underpinning our Industrial Strategy is appreciated across government.

We would be happy to discuss our response in more detail with the IPO.

Are you responding as an individual, business, intermediary, representative body?

We are responding to this consultation as a business: Ericsson Limited.

What does your business do / in what sectors do you operate?

Ericsson is a global leader in delivering Information and Communication Technology (ICT) solutions. In fact, 40% of the world's mobile traffic is carried over Ericsson networks. We have customers in over 180 countries and comprehensive industry solutions ranging from Cloud services and Mobile Broadband to Network Design and Optimization.

Ericsson also owns a significant media business in the UK, including Ericsson Television in Southampton and Ericsson Broadcast and Media Services (EBMS), formerly Red Bee Media, based in Ealing, with offices in Manchester and Glasgow.

How large is your business, and what proportion of your assets are IP-based?

Ericsson has one of the industry's strongest patent portfolios (with a total count of over 42,000 granted patents). R&D is at the heart of our business and approximately 24,100 employees are dedicated to our R&D activities (2016 figures).

In what UK regions do you operate?

We operate throughout the UK. Our headquarters are in Guildford and we have several other offices in the UK including in London, Coventry, Glasgow, Leeds, Newbury and Southampton.

We have research collaborations with Kings College London and the University of Edinburgh.



In what international territories do you operate?

Practically all; we operate worldwide. Our technology is used worldwide.

Is there more the IPO could do to help UK companies operating overseas?

We think that the IPO's IP attaché program is very good. The program enables the UK to encourage best practice, particularly in developing countries, for example regarding handling of computer related inventions, timeliness and quality of patent application examination, as well as to foster an appreciation for the importance of a strong and balanced IP system to economic growth.

What do you spend on IP?

We cannot disclose that figure, but we file around 1500 international patent applications a year and have a portfolio of over 42,000 granted patents. Perhaps more importantly, over the last three years Ericsson has spent approximately 9 billion pounds on R&D. This investment is only possible because the relevant intellectual property framework enables us to secure a return on our investments through licensing of standard essential technology on fair, reasonable and non-discriminatory (FRAND) terms, which in turn incentivises continuous investment in the further development of open standards.

Which aspects of the IP system do you use?

We make significant use of the patent system. Generally, we obtain patent protection in the UK via the EPO, as we wish to obtain protection across Europe. On occasion, we have made use of the UK courts system to litigate patent cases.

What do you particularly value about the UK's IP system?

That it is strong and balanced, with good quality judges.

Do you face barriers when using the UK IP system?

Whilst already relatively fast, we consider that the speed of handing down of Court judgements in patent cases could be further improved. Ericsson is committed to providing access to its standard essential technology on FRAND terms; in the exceptional cases where we have resorted to litigation it is because a user of our technology is unwilling to come to the licensing table or to negotiate seriously (for instance, by using delaying tactics). In these cases, we need to bring licensing negotiations to a swift conclusion to protect our business, and the speed of Court decisions does impact our choice of jurisdiction for patent litigation.

We strongly support UK participation in the Unitary Patent Court (UPC) and Unitary Patent (UP) system. The UPC and UP will significantly simplify obtaining patent protection and, where necessary, litigation of patents across participating countries.

We have the following comments on some of the proposals set out in the Annex to the Consultation:



IP Trading Platforms

In 2016 Ericsson spearheaded the launch of Avanci¹, an independent licensing platform for cellular technology for Internet of Things (IoT) markets such as connected cars and smart meters. At the moment, several patent holders have already joined this initiative besides Ericsson, namely Qualcomm, Interdigital, ZTE, KPN, Sony, Panasonic, Sharp and Vodafone. The IPO could consider a role in promoting (on an equal footing basis) the existence of such licensing and trading platforms as part of its educational activities. However, it is important that such initiatives remain industry driven.

B2B Model IP Agreements

We consider that Lambert style toolkits for Business to Business, B2B, collaborations could be useful especially for SMEs who may have relatively little experience of such collaborations.

IP licensing Resolution

Introductory comments

We would like to comment on the IPO's remark that *"IP trading can present some companies with barriers to innovation, notably in the area of Standard Essential patents (SEPs), where we are told that the issue of portfolio fragmentation can lead to spiralling costs to innovators operating in standards-reliant sectors"*.

Firstly, it should be noted that ICT standards are "development standards" rather than mere "interoperability standards". Standardisation within standard development organizations ("SDOs") like ETSI and ITU involves not only the setting of certain product requirements (e.g. for consumer safety or environmental protection) but also the actual development of cutting-edge technologies. Cellular standards such as 4G/LTE (and, in the future, 5G) are thus not only 'set' but also developed from the ground up, becoming complete technical blueprints which can be used without further R&D. In other words, these standards are created based on technology voluntarily contributed by many companies (including SMEs), universities and research institutes, all of which are innovators in their own right.

Within the telecom and ICT industries, patents play an important role in standardisation work by allowing innovative actors to share their cutting-edge technology on fair and reasonable terms – that is, with the understanding that those who make use of it will agree to compensate innovators for their investments. This allows SDOs to attract the best technologies to their standards. At Ericsson, we are committed to the FRAND system of licensing standard essential patents. This system has been widely used within the telecom sector for over two decades and the vast majority of licensing negotiations have been successfully concluded, which is a sign that the system works.

This approach has enabled innovation on top of the cellular ecosystem by many different, often competing companies (which mostly have not contributed to the development of the standards), as well as massive consumer benefits². At the same time, it enables companies to obtain a return on their R&D investment. This dynamic underpins the entire ICT ecosystem and incentivises continued investments in the development of open standards.

¹ Link: www.avanci.com.

² For more info:

https://www.bcgperspectives.com/content/articles/telecommunications_technology_business_transformation_mobile_revolution/



IoT and open standards

Successful 5G and IoT standards will require a tremendous amount of investment, engineering expertise and the capital intensive, years-long development of cutting-edge technologies. An open, inclusive, transparent, consensus-based and balanced standardisation framework is needed to ensure the broadest possible base of companies contributing technology to these standards and an even larger group of companies willing to implement them in their products.

While IoT brings with it a new level of complexity to the licensing of standardised technology (with new entrants from multiple industries seeking to add connectivity to their products), the wireless cellular industry is nevertheless already moving to address these challenges – for instance, with the launch of Avanci (explained above); as well as other industry-led initiatives, such as on-going work on a Code of Conduct for licensing of standard essential technology hosted by CEN-CENELEC³.

Copyright Tribunal Model

Patent license disputes can already be raised in the Courts and various arbitration venues. Alternative dispute resolution procedures can be useful alternatives for the parties to consider, on a voluntary basis, provided both are acting in good faith and are genuinely interested in finding an efficient solution to the licensing discussions (and are not abused to try to delay discussions). Having said this, we do not see any need for the IPO to set up a tribunal.

We also note that it is important that standard essential patent holders have the right to seek injunctions in the Courts against unwilling licensees. Without such a deterrent there is nothing to discourage an unwilling licensee from “holding out” from taking a license. Ultimately this behaviour leads to increased litigation, discouraging companies from contributing to open standards – and is also unfair on responsible licensees whose royalties have to be spent, in part, on funding litigation potentially against their competitors (who have a lower cost base).

Finally, Ericsson is strongly against any suggestion that copyright-inspired collective management of rights is an appropriate model for licensing of standard essential technology, particularly for IoT. The basic rationale for collective management of rights in copyright (e.g. that it is impossible for several categories of right holders to monitor/track every use of a song) does not hold true for IoT. Patent pools and other industry-led (voluntary) initiatives can address the practical challenges associated with licensing in this space if and when needed.

IPR as assets / portfolio fragmentation

As noted in other parts of the consultation and in the IPO's 2013 “Banking on IP” report, IP rights (and in particular patents) are assets which can be traded as such. In respect of standard essential patents, mechanisms can and are put in place to ensure that the FRAND commitment travels with the patents when transfers occur (e.g. for wireless cellular standards, the ETSI IPR Policy addresses this issue in Clause 6.1bis).

Moreover, the Court of Justice of the European Union has provided clear guidelines on how licensing negotiations involving standard essential patents should be conducted⁴. This

³ For more info: <https://www.cencenelec.eu/news/workshops/Pages/WS-2017-011.aspx>

⁴ Case C-170/13, Huawei Technologies Co. Ltd v ZTE Corp., ZTE Deutschland GmbH.



enables prospective licensees to assess whether approaches by patent holders fulfil the (good faith) obligations set out by the CJEU.

Royalty Free Patents

In some cases, it may be commercially advantageous for a company to offer licenses to its IP on a royalty-free basis. However, in many other cases, and necessarily so for certain types of organisation (e.g. universities and research institutes), being able to receive royalties is critical as it enables IP holders to achieve a return on their R&D efforts and so continue to innovate. Whether to license royalty free must therefore be at the IP owner's discretion.

While we have no objections to the IPO declaring on the face of a patent that it may be used free of charge if an IP owner so wishes, we would recommend further study on the actual benefits of such a measure (necessarily limited to UK patents). In any case, should this proposal be taken up, it should be made clear that a user of the relevant technology may not necessarily be free to operate, as the technology may be covered by one or more other patents for which the user may require a license.

We have the following proposal for a new service the IPO could offer:

SME Education regarding Licensing of IP

As an extension to the IPO's existing education and outreach activities, the IPO could consider offering an SME help desk style service to help educate SMEs on the use of IP as an asset and, in particular for IoT, on issues relating to licensing of standardised technology (as well as the potential business case for contributing technology to open standards).