



A FRAND regime for dominant digital platforms?

Contribution by 4iP Council to the European Commission's workshop
on *Shaping Competition Policy in the Era of Digitisation*

1. Introduction

European Commission Vice President Margrethe Vestager has launched a consultation asking, amongst other things, what the role of competition policy should be in addressing concerns linked to the market power of digital platforms. In particular the European Commission seeks views on if, and how, regulatory policy can address leveraging and lock-in concerns.¹

This question is apposite, given that digital platforms can grow to such a scale so quickly that their market position soon appears unassailable, yet they may have a significant impact on adjacent and downstream markets. In addition to concerns of leveraging and lock-in, exacerbated by network effects, or indeed to exclusionary practices linked to devices or applications that need to interoperate with platforms, there are new concerns not traditional within the competition policy space. These are linked to the importance of data as the fuel of the new economy or to consumer protection issues, such as privacy and data protection. For all these reasons, regulators around the world face a challenge to create a satisfactory framework to ensure fair access of consumers and users to digital platforms while supporting an environment for innovation and competition to flourish.²

Competition regulation is one of the tools available to policy makers, but there are others which can also serve as inspiration to the European Commission. Given the complexity of establishing clear market definitions and market power in such dynamic markets, and considering the speed of technological development and competition for the market (i.e. 'winner-takes-all'), one flexible solution in the regulatory toolkit could be enforceable fair-trading conditions between rival digital platforms and their users. In particular, requiring trading between a dominant digital platform and others to take place on Fair, Reasonable and Non-Discriminatory (FRAND) basis might be a useful option, given that FRAND is a commonplace and proven mechanism relied on in both commercial agreements and regulation.

4iP Council's role is to promote a better understanding of the role of intangible assets in fostering innovation. With this in mind, the following paper aims to contribute to the discussion on how to address the concerns of leveraging and lock-in, based on an analysis of existing practices across numerous industries and jurisdictions where critical inputs are

¹ See <http://ec.europa.eu/competition/scp19/>.

² It is notable that a number of competition authorities are interested in this topic. For example the US Federal Trade Commission is currently looking at "*the identification and measurement of market power and entry barriers, and the evaluation of collusive, exclusionary, or predatory conduct or conduct that violates the consumer protection statutes enforced by the FTC, in markets featuring "platform" businesses.*" See <https://www.ftc.gov/news-events/press-releases/2018/06/ftc-announces-hearings-competition-consumer-protection-21st>. See also Khan, Lina, Amazon's Antitrust Paradox (January 31, 2017). Yale Law Journal, Vol. 126, 2017.



in play. It also explores the multiple sources for such a contention, whether industry norms, policy, legal authority, regulation and legislation. 4iP Council will produce a fuller paper in due course.

2. FRAND in the context of standardisation

FRAND is a widely used notion in the context of licensing patents that are essential to practicing a technology standard (known as Standard Essential Patents, or SEPs). The voluntary FRAND commitment is usually given by a technology contributor to a standard development organisation (SDO) to offer access to patented essential technologies in exchange of a fair reward.³ Depending on the jurisdiction a FRAND commitment is usually enforceable under contract law or other principles such as quasi-contract, estoppel and in some instances antitrust law.⁴

In the standardisation context, the FRAND regime is intended to balance competing interests of different players, making standardisation an attractive enterprise for all kind of business models.⁵ The FRAND regime essentially does so by ensuring access to essential technology on terms that are fair and reasonable for both licensor and licensee, in order to guarantee the uptake of new technologies and its wide diffusion, while valuing technology contributions to standardisation efforts and encouraging further research for future standardisation.

The FRAND regime has empirically led to hugely successful results, ensuring both broad access to and wide dissemination of advanced technologies.⁶ What the precise rights and obligations are that the FRAND regime creates depends on the intention of the parties (usually set out in the SDO's IPR policy) and the specificities or usual practices of the particular industry. However, the flexibility of the FRAND commitment has led it to be broadly adopted by SDOs across the board, notably the formal EU standardisation bodies, ETSI and CEN/CENELEC, as well as numerous informal standards organisations. As a result, this industry-led solution has been enshrined in European regulation on standardisation⁷ and

³ See the European Commission Communication Setting out the EU approach to Standard Essential Patent, COM(2017) 712 final, 29 November 2017.

⁴ National SEP litigation tends to focus mainly on non-competition elements, see for example See *Huawei v. Unwired Planet*, [2017] EWHC711(Pat) or the repository of post-Huawei v ZTE national case law at <https://caselaw.4ipcouncil.com/>.

⁵ Moreover, SDOs typically follow certain principles established by the World Trade Organisation that ensure that an SDO follows basic principles of good practice, such as not giving privilege to, or favour the interests of, any member (impartiality). See more on the principles such as openness, consensus based, transparency, and impartiality at Fredrik Nilsson, GRUR Int. 2017, 1017.

⁶ For example, between 2005 and 2013, the average mobile subscriber cost per megabyte decreased 99 percent, mobile network infrastructure costs were reduced by 95 percent, and 4G networks were able to transfer data 12,000 times faster than 2G networks. See *The Mobile Revolution*, the Boston Consulting Group, January 2015. According to GSMA by 2025 5G networks are likely to cover one-third of the world's population. See more at <https://www.gsma.com/futurenetworks/technology/understanding-5g/5g-innovation/>.

⁷ See the European Standardisation Regulation No 1025/2012, 25 October 2012, which seeks to create "an effective and efficient standardisation system which provides a flexible and transparent platform for consensus building between all participants" requires that for technical specifications to fall under the Regulation they be covered by the FRAND regime, reflecting WTO norms.



broadly promoted in European standardisation policy⁸, as part of the regulatory framework around standards development and dissemination.

3. FRAND in the context of European Competition Policy

a. Competition Policy and Standardisation FRAND

Competition policy in Europe has approached FRAND-based SEP licensing from a variety of angles. At the European level, the European Commission's Guidelines on Horizontal Cooperation Agreements (which include standardisation agreements) suggests that while adopting a FRAND policy may not constitute a regulatory requirement, the adoption of a FRAND policy would bring the SDOs within an antitrust safe harbour.⁹ This strongly implies that if access is ensured on FRAND terms, they cannot be abusive. Complying with the FRAND safe harbour also means that there is, in principle, no need to undertake the often-complex task of assessing dominance.

In the *Huawei v ZTE* (C-170/13) decision¹⁰ on FRAND-accessible SEPs, the Court of Justice of the EU focused on the threat of market exclusion and set out the rights and obligations on both parties created by the FRAND regime. The Court held amongst other things, that an antitrust defence could be raised against a request for an injunction where a dominant SEP holder had not made a FRAND offer.¹¹ What the CJEU case law shows is that the law intervenes when needed, in those exceptional circumstances to ensure that third parties are not unduly excluded on the basis of proprietary rights (whether patents, copyright or other). In the context of de facto standards,¹² the German Bundesgerichtshof permitted an antitrust defence to be raised where a patent infringer was not able to get a FRAND licence to a dominant de facto standard (even where a FRAND commitment had not been made or required).¹³ Thus, competition law in Europe takes a FRAND-based approach to essential patents related to both de jure and de facto standards.

⁸ See e.g. the European Commission Communication on Intellectual Property Rights and Standardization (COM(92) 445 final), 27 October 1992, the European Commission Communications on Digitising European Industry: Reaping the full benefits of the Digital Single Market, COM(2016) 180 final or on ICT Standardisation Priorities for the Digital Single Market COM(2016) 176 final of 19 April 2016 or the European Commission Communication Setting out the EU approach to Standard Essential Patent, COM(2017) 712 final, 29 November 2017.

⁹ European Commission Communication on Guidelines on the applicability of Article 101 of the Treaty on the Functioning of the European Union to horizontal co-operation agreements, OJ C11, 14 January 2011. See para 279. In addition, the European Commission's Technology Transfer Guidelines go somewhat further, suggesting that FRAND commitments should be included in patent pools' self-assessment, whether or not these pools were licensing SEPs.

¹⁰ See *Huawei Technologies Co. Ltd v ZTE Corp., ZTE Deutschland GmbH*, Case C-170/13, 16 July 2015, available at <http://curia.europa.eu/juris/document/document.jsf?docid=165911&doclang=en>

¹¹ See para 54 of the ruling: "*It follows that, having regard to the legitimate expectations created, the abusive nature of such a refusal may, in principle, be raised in defence to actions for a prohibitory injunction or for the recall of products. However, under Article 102 TFEU, the proprietor of the patent is obliged only to grant a licence on FRAND terms.*"

¹² The term "de facto" standard is used to mean a proprietary technical solution that gains such market take-up that it becomes the effective standard. On the other hand, "formal" or "de jure" standards are those which are developed in a collaborative manner within recognised SDOs, responding to a government mandate or market need.

¹³ On the facts before it, the court clarified that the compulsory license defence against the request for injunctive relief was only possible when the alleged infringer has made an offer to the patent proprietor that the patent



b. Competition Policy and ‘Non-standardisation FRAND’

The FRAND concept does not necessarily need to be limited to standardisation. In fact, FRAND is an increasingly accepted ‘good faith’ notion recognised by competition authorities and applied as a simple access remedy for the supply of a particular product. For instance, in the context of the *Microsoft* case the European Commission determined that Microsoft’s operating system APIs (Application Programming Interfaces) was an essential input and required FRAND-like access.¹⁴

There are also number of recent merger review cases where parties agreed to adopt a FRAND-like competition remedy to address European Commission’s concerns that access to critical inputs needed to be ensured or maintained. For example¹⁵:

- In *Siemens/Drägerwerk*¹⁶ the parties offered commitments to ensure the continued interoperability between their medical equipment on the one hand and patient monitors on the other, and their interoperability with hospital data management systems. This included maintaining and making available all existing and future interfaces and communications protocols. All information concerning interfaces and communications protocols will be made available on request to third parties and “*will occur without delay, on a non-discriminatory basis and free-of-charge (or with a charge to cover documentation costs)*”.
- In *Liberty Global/De Vijver Media*¹⁷ the companies committed to included access to critical television channels, Vier and Vijf, on FRAND terms to any interested TV distributor in Belgium. Other licensing remedies were also included on FRAND terms.
- In *Worldline/Equens*¹⁸ the companies agreed to commit to license key card and payment processing software, as well as the source code for the Poseidon software and the ZVT protocol, on which most German point of sale terminals run, on FRAND terms to payment network service providers within Germany.

Examples can be found at the national level. In order to secure supplies of an essential input, the Hellenic Competition Commission (HCC) imposed a FRAND commitment on

proprietor must not reject, and behaves as if the patent proprietor had already accepted his offer. See *Orange Book Standard*, KZR 39/06, (Bundesgerichtshof—BGH, May 6, 2009).

¹⁴ According to the Commission “*Microsoft shall on reasonable and non-discriminatory terms allow the use of interoperability information*”. See Case T-201/04, *Microsoft v. Commission*, 2007 E.C.R. II-3601, para 193. See also paras. 808 et seq. and para. 1231 and 1261.

¹⁵ The European Commission is by no means alone in its reliance on the FRAND principle. The US competition authorities are increasingly accepting FRAND-based remedies in a merger context including the US Department of Justice review of *Google/ITA* (2011), the US FTC review of *Northrop Grumman/Orbital* (2018), the decision of the Competition Commission of India in *Bayer/Monsanto* (2018), the decision of the South African Competition Tribunal in *Dow/DuPont* (2017) and the Japan FTC in *ASML/Cymer* (2012).

¹⁶ COMP/M.2861 (2013), para 154.

¹⁷ “[T]he Commission considers that the reference to ‘fair, reasonable and non-discriminatory terms’ is the most appropriate benchmark to for the terms to which various types of TV distributors will be entitled under the commitments”. COMP/M.7194 (2015), para. 655. See also paras. 624, 625, and 672.

¹⁸ COMP/M.7873 (2016). “*In order to address the Commission’s concerns in Belgium and Germany, the companies submitted remedies, consisting of the divestment of PaySquare’s business in Belgium and of granting licenses for the Poseidon software on fair, reasonable and non-discriminatory (so-called FRAND) terms during a period of ten years.*” See more at http://europa.eu/rapid/press-release_IP-16-1462_en.htm



Hellenic Petroleum's (ELPE) takeover of British Petroleum Hellas SA (BP) in 2009¹⁹ whereby ELPE would grant access to third parties (wholesalers) to its storage facilities/depots in Crete under FRAND terms. The HCC noted "*that certain behavioural remedies, when complementing a core structural remedy, may be effective, particularly if used during a transitional or bridging period, until a competitive market structure develops*".²⁰

A FRAND commitment ensures that a company controlling a product will supply its customers on the same or similar terms as it does to its own business and can therefore not unfairly benefit its own products or services. Given that significant market position can be acquired quickly in the platform context and that network effects create significant barriers to creating a competitive balance, applying a flexible model has its merits.

One of the challenges facing competition authorities and policy makers is to create the appropriate rules to ensure that competition flourishes. It is notable that in these decisions competition authorities have addressed not only access to critical content, but also the issue of ensuring interoperability between device interfaces and communications protocols and associated software and data management systems.

FRAND has now been applied by competition authorities around the world to ensure access to products, across a range of sectors including medical equipment, television broadcasting, payment processing, gas networks, flight search, missile systems and genetic plant material on the basis of recognised commercial terms. Competition law could therefore promote access to critical inputs using a tried-and-tested regime that ensures a balance of interests, guaranteeing equality of arms in negotiations, minimising impact of regulatory intervention and basing remedies on sector practices.

4. Regulatory Policies and FRAND

There are a number of sources of European authority imposing a regulatory FRAND access where critical resources must be made available for markets to stay open. Over and above competition law remedies, the notion of access on FRAND terms has been used in broader regulated industries (as it has in industries involving standardisation). For instance, in the telecoms sector the European Access Directive²¹ enables national regulatory authorities to

¹⁹ See HCC Decision 465/VI /2009.

²⁰ See Contribution of Greece to the Roundtable on Remedies in Merger Cases held by the OECD's Competition Committee (Working Party No.3 on Co-operation and Enforcement), June 2011. DAF COMP(2013)11, 30 July 2012, page 98.

²¹ See Directive 2002/19/EC of the European Parliament and of the Council of 7 March 2002 on access to, and interconnection of, electronic communications networks and associated facilities (Access Directive), *OJ L 108, 24.4.2002*. See Article 5.1 requiring national regulatory authorities to encourage, and where appropriate ensure, "*adequate access and interconnection, and the interoperability of services, exercising their responsibility in a way that promotes efficiency, sustainable competition, efficient investment and innovation, and gives the maximum benefit to end-users*" and in order to do so, authorities should be able to impose (under (b)) ... obligations on operators to provide access to the certain facilities (referred to in Annex I, Part II) on FRAND terms. In addition Annex I, Part I (b) of the Directive states, in relation to conditional access to digital television and radio services broadcast to viewers and listeners that all such operators must, inter alia, offer to all broadcasters, on a fair, reasonable and non-discriminatory basis, compatible with Community competition law, technical services enabling the broadcasters' digitally-transmitted services to be received by viewers or listeners authorised by means of decoders administered by the service operators, and comply with Community



impose FRAND access obligations on network operators. Former Directive 95/47/EC on the use of standards for the transmission of television signals also relied on FRAND access. Other sectors are also relying on FRAND-based access principles, given the flexibility the FRAND regime provides. For example, the UK Financial Conduct Authority has issued a policy statement that would require regulated benchmark administrators to grant access to and licenses to use benchmarks on a FRAND basis.²²

5. Conclusion: A FRAND policy for Dominant Digital Platforms?

The FRAND regime reduces lock-in to proprietary ecosystems and the threat of bundling, thus ensuring access to critical infrastructure, products and services on fair, reasonable and non-discriminatory terms. There are numerous examples of the FRAND regime being used to ensure that platforms or critical inputs become or remain accessible to third parties under reasonable and non-discriminatory terms. FRAND guarantees interoperability with broader ecosystems and third-party applications or fair access to critical data platforms, while allowing a fair compensation for the sharing of the technology (encouraging further investment in future innovation).

In his recent draft White Paper, “Potential Policy Proposals for Regulation of Social Media Technology Firms”²³ U.S. Senator Mark Warner discussed the fact that “*certain technologies serve as critical, enabling inputs to wider technology ecosystems, such that control over them can be leveraged by a dominant provider to extract unfair terms from, or otherwise disadvantage, third parties*”. He proposes that “[l]egislation could define thresholds – for instance, user base size, market share, or level of dependence of wider ecosystems – beyond which certain core functions/platforms/apps would constitute ‘essential facilities’, requiring a platform to provide third party access on fair, reasonable and non - discriminatory (FRAND) terms and preventing platforms from engaging in self – dealing or preferential conduct”.

Sensitive to the nature of investment and innovation, Senator Warner adds that “... *the law would not mandate that a dominant provider offer the service for free; rather, it would be required to offer it on reasonable and non – discriminatory terms (including, potentially, requiring that the platform not give itself better terms than it gives third parties)*.” Senator Warner also notes that legislation or regulation to provide third parties access to critical technology could be useful to ensure that incentives to compete are maintained and abuses do not occur: “*Interoperability could be achieved by mandating that dominant platforms maintain APIs for third party access. Anticipating platforms’ counter – arguments that fully*

competition law, and (c) holders of industrial property rights covering relevant consumer equipment grant licenses to manufacturers on FRAND terms.

²² See PS16/4, February 2016. For example para 1.9 states “*In summary, our proposals required regulated benchmark administrators to grant access to and licences to use benchmarks on a fair, reasonable and non-discriminatory basis, including with regards to price. We proposed that such access should be provided within three months following a written request. We proposed that different fees should be charged to different users only where this is objectively justified, having regard to reasonable commercial grounds such as the quantity, scope or field of use requested. Our proposals also set out a list of non-exhaustive factors that we may consider in assessing whether the terms of access to a benchmark are FRAND*”.

²³ [See U.S. Sen. Mark R. Warner, Potential Policy Proposals for Regulation of Social Media and Technology Firms, 2018](https://www.scribd.com/document/385137394/MRW-Social-Media-Regulation-Proposals-Developed) <https://www.scribd.com/document/385137394/MRW-Social-Media-Regulation-Proposals-Developed>.



open APIs could invite abuse, the requirement could be that platforms maintain transparent, third – party accessible APIs under terms that are fair, reasonable, and non - discriminatory (FRAND).”

It is likely that a regulatory framework of dominant data platforms will occur in some form or other. FRAND is a recognised framework with a track record of success and there are ample examples of the FRAND regime being used in Europe to ensure the availability of products or access to markets, whether through regulation or as voluntary measures to avoid the need for intervention. FRAND is a flexible tool for managing dominant digital platforms and could be applied as a safe harbour or a regulatory or legislative solution. Whether the authority for imposing FRAND on dominant digital platforms should come from policy, enforcement of unilateral conduct or mergers or legislation is beyond the scope of this paper.