July 29, 2021

The Honorable Michael Doyle  The Honorable Robert Latta
Chair       Ranking Member
House Committee on Energy & Commerce  House Committee on Energy & Commerce
Subcommittee on Communications       Subcommittee on Communications
& Technology       & Technology
Washington, District of Columbia 20515  Washington, District of Columbia 20515

A Safe Wireless Future: Securing our Networks and Supply Chains

Dear Chair Doyle, Ranking Member Latta, and Members of the Subcommittee,

We applaud this Subcommittee for its examination of network security in the United States, with the hearing held on June 30, 2021, titled, "A Safe Wireless Future: Securing our Networks and Supply Chains." ACT | The App Association (the App Association) is the leading trade group representing small mobile software and connected device companies in the app economy, a $1.7 trillion ecosystem led by U.S. companies and employing 177,060 in Pennsylvania and 168,190 in Ohio alone.¹ Our members develop innovative applications and products that drive the rapid adoption of mobile technology and that improve workplace productivity, accelerate academic achievement, monitor health, and support the global digital economy. Our members play a critical role in developing new products across consumer and enterprise use cases, enabling the rise of the internet of things (IoT).

We support the Subcommittee’s oversight of supply chain and network security for wireless communications. As part of this endeavor, we urge the Subcommittee to support enforcement of antitrust law to prevent subversion of the standards-setting process through anticompetitive standard-essential patent (SEP) licensing practices. Open, private sector-led standards-setting depends heavily on the ability of innovators to obtain licenses to SEPs on terms that are fair, reasonable, and non-discriminatory (FRAND). Aggressive SEP licensing behavior that harms competition and consumers creates a weak spot in American innovation, taxing entrepreneurship and the development of new products and services that use standardized technology as a foundation. In protecting the security of standardized technology and supply chains, your task includes rejecting practices that weaken private sector-led standards-setting like anticompetitive SEP abuse, which disproportionately benefits foreign adversaries.

Standards, SEPs, and FRAND

Open and consensus-based technological standards (like 5G, 4G, Wi-Fi, and USB) fuel innovation. Trusted standards-setting organizations (SSOs) develop these consensus technology standards to promote interoperability between products and services as well as to ensure end-user safety, among other reasons. Because of the role of standards as baselines to innovation, small businesses need to utilize these standards to compete in the market. And while a technology standard develops within the SSOs, companies voluntarily offer their patented technology to be a part of the standard. Small businesses using the standard need to license the patents to utilize the

standards that contain them. A patent needed to practice a standard is generally considered “essential” to the standard (called a standard-essential patent, or SEP).

Having a patent declared as essential to a standard generally confers market power on a SEP owner, so commitments to license access to those standards on FRAND terms are necessary to discipline that market power and prevent SEP owners from gouging innovators that use standards. Experience has shown that, without FRAND constraints, some SEP owners will perpetrate market distortions that ultimately harm consumers by reducing the quality and quantity of end products and services. As part of the FRAND commitment, SEP holders volunteer to license their patents on FRAND terms to any future parties that wish to utilize the standard and need access to a patent license. In short, FRAND promises are an important check on anticompetitive abuse, and ignoring them can constrain competition in a way that harms competitors and consumers.

The Current SEP Landscape

Resolving disputes around SEP licensing conduct, including the applicability of antitrust law to SEP licensing that harms competition and consumers, has generally fallen to the court system. The App Association has filed amici several times over the last few years on cases including Continental Automotive Systems v. Avanci LLC, and Federal Trade Commission v. Qualcomm. Aggressive SEP licensors seek to carve out an exception for anticompetitive licensing legislatively as well, and these efforts span the jurisdiction of various congressional committees. For example, before Senate passage of the United States Innovation and Competition Act (USICA) of 2021, a few proposed amendments to the base text of the bill, SA 1932 and 1829, would affect SEPs. Notably, one of the amendments would enable a single SSO participant to prevent SSO activities, which would have effectively ended private sector-led standards-setting, leaving government-led standards-setting (as is the favored approach in the People’s Republic of China (PRC)) to take its place. The other amendment would require a potential SEP licensee from one of a list of countries maintained by the Department of Commerce to take a license from a SEP licensor on any terms within 12 months of initial offer, or else end up on a national security “watch list,” subjecting the company to import controls. The amendments are a naked attempt to manipulate the law to allow SEP holders to ignore FRAND commitments. Ignoring these commitments would harm our national security posture because they would enable aggressive SEP licensors to increase costs, eliminate competitors, and strangle innovation in the United States. The result would be an ecosystem in which U.S. leadership on standards-setting cedes ground to the PRC’s government-led model and where we may rely on a single supplier of key hardware elements. As former Secretary of Homeland Security Michael Chertoff pointed out, a Qualcomm monopoly on baseband chipsets—achieved through anticompetitive FRAND violations—“creates an inviting target for adversaries, who would need to find and exploit only one vulnerability to execute a destructive attack.” Simultaneously, SEP abuse has been a barrier to entry by U.S.-based firms into the market for wireless infrastructure, resulting in a lack of American options for LTE and 5G equipment. And the

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2 Brief for ACT | The App Association as Amicus Curiae, Continental Automotive Systems v. Avanci LLC et al., appeal from N. D. TX case no. 3:19-CV-02993 (5th Cir.).
outsized costs of SEP abuse also threatens U.S. investments in and promotion of OpenRAN technologies.

For companies based in the PRC, the advantages of enabling anticompetitive SEP abuse is undeniable. Huawei leads the world with 3,007 declared 5G patent families. It is a matter of public record that Huawei will begin relying more on aggressive SEP licensing for its revenue, expecting $1.2 to $1.3 billion in revenue from 5G SEP licensing from 2019 to 2021, including by charging handset manufacturers (instead of component suppliers) SEP royalties. Not to be outdone, ZTE also recently announced its intention to squeeze downstream manufacturers for SEP royalties, implying a licensing strategy that is inconsistent with its FRAND commitments, as it could prevent component manufacturers from licensing its SEPs. These developments highlight that suspending antitrust law for SEP holders to elbow out competitors actually disproportionately benefits both PRC standards-setting models and SEP holders based in PRC, to the detriment of American innovation and security.

Conclusion

We thank you for considering our concerns as you chart a course for the important policies in wireless network and supply chain security. The United States is the envy of the world on innovative technologies and industries. Standards, which are vital to the development of next-generation networks and the internet of things, will only remain strong if the U.S. standards ecosystem balances the interests of those that work to build standards with those that utilize them to innovate.

Sincerely,

Morgan W. Reed
President
ACT | The App Association

6 [https://www.cnbc.com/2021/03/16/huawei-to-charge-royalties-to-smartphone-makers-using-its-5g-tech.html](https://www.cnbc.com/2021/03/16/huawei-to-charge-royalties-to-smartphone-makers-using-its-5g-tech.html)
7 Id.
8 See Bing Zhao, “ZTE targets up to $930 million in patent revenue over the next five years” IAM Media (Jul. 2, 2021) available at [https://www.iam-media.com/patents/zte-targets-930-million-patent-licensing-revenue-over-next-five-years](https://www.iam-media.com/patents/zte-targets-930-million-patent-licensing-revenue-over-next-five-years).