

December 29, 2014

Chairman Thomas Edgar Wheeler
Federal Communications Commission
445 12th Street S.W. Washington, DC 20554

Re: Rules to Govern Devices Capable of Cellular Network Switching

Dear Chairman Wheeler and Commissioners:

As a U.S. Military Combat Veteran and a West African Immigrant, we have both made significant personal investments in the country and its future. We hold that the attributes of property rights, innovation and economic dynamism are the essential components of past and future success of the Great American Experiment.

Given the FCC's role in ensuring the wireless market competition enshrined in the 1996 Telecommunications Act, we feel a responsibility to bring to your attention that competition is threatened in the emerging digital marketplace for wireless services created by devices capable of cellular network switching. The FCC's engagement is required if this new marketplace is also to embody the spirit of competition laid out in the 1996 Telecommunications Act.

Communication and information are the lifeblood of the modern economy. Cellular networks represent the primary, and increasingly often, the *only* option for telephony (Voice and SMS) and Internet service for millions of Americans. For most devices today removable Subscriber Identity Module (SIM) cards mediate access to cellular networks. These SIM cards are generally locked to a single Wireless Service Provider.

With the emergence of reprogrammable SIM card technology and the Internet of Things (IoT), it is becoming increasingly clear market forces will deliver devices capable of switching cellular networks *without having to physically remove SIM cards*. With such devices the experience of choosing a cellular network will be similar to seamlessly connecting to commercial Wi-Fi networks.

These devices will create a new marketplace for cellular service whereby the connected device serves as the point-of-sale for cellular service. Coincident with the arrival of the digital marketplace for cellular services is the need to ensure

there are rules governing it. These rules must be consistent with the legislative and regulatory precedents set following the Telecommunications act of 1996.

We applaud the FCC for upholding Wireless Local Number Portability, which has unlocked tremendous market value for Consumers, Enterprises and Wireless Service Providers by making it easier to switch from one cellular network to another. Similar to Local Number Portability (LNP) we believe additional FCC rules delineating user rights and Wireless Service Provider responsibilities are necessary to ensure the U.S. wireless market is able to fully capitalize upon this new digital marketplace.

Proposed FCC Rules to Safeguard Cellular Network Switching

We propose the FCC adopt rules that make the module performing the SIM function inside a connected device the property of the device owner (whether a consumer or enterprise), and therefore remain reprogrammable, for the life of the device. Wireless Service Providers participating in the new marketplace would not be allowed to permanently lock the device to a specific cellular network, if the device has been paid in full and purchased through independent distribution channels.

Such rules are consistent with legislative developments in other countries. We would like to bring to your attention a recent legislative change in the Netherlands resulting in Network Agnostic SIM cards. The change was prompted by the recognition that it is logistically impossible to require users of Machine-to-Machine (M2M) connected devices (e.g. automobiles, agricultural equipment, environmental sensors, etc.) to physically change SIM cards if they desire to change the devices' wireless connectivity provider.

Recent Legislative and Regulatory History

As the wireless communications industry has developed in America, Congress and the FCC have enacted legislation and rules, respectively, in order to best harness the power of mobile technology for the benefit of the American people.

The overarching goal of the 1996 Telecommunications Act was “To promote competition and reduce regulation in order to secure lower prices and higher quality services for American telecommunications consumers and encourage the rapid deployment of new telecommunications technologies¹.” One key element of the act was the aforementioned Local Number Portability (LNP) stipulation. This enabled consumers to keep their phone numbers when they switch carriers,

¹ Pub. L. No. 104-104, 110 Stat. 56 (1996).

including wireless carriers². Despite many appeals by Wireless Service Providers for forbearance against this rule, the FCC deemed it was in the public interest because LNP would facilitate the entrance of new players, foster competition and enable customers to choose a carrier based on factors such as price, quality service and coverage³.

More recently, Congress passed, and President Obama signed, "Unlocking Consumer Choice and Wireless Competition Act" (S.517) into law. This law safeguards users' right to use their device on any wireless service provider's network. It codifies the rights of mobile device users and contributes to a competitive and innovative wireless services market seeking to offer consumers the best possible service and value.

Apple SIM exposes need for FCC Oversight of the Digital Marketplace for Wireless Services

If one follows this trajectory of legislative and regulatory activity, it is logical that the owner of an unsubsidized, connected device capable of cellular network switching, that was purchased through non-Wireless Service Provider distribution channels, should be able to switch among Wireless Service Providers as long as the Wireless Service Providers make their connectivity plans available in the digital marketplace accessible by the device. No Wireless Service Provider should be able to permanently *burn* the device to its network following the download of its network profile. Unfortunately, this is not what happened in the case of the Apple SIM card.

The Apple SIM card, which is sold with Apple's latest generation of iPads, enables an end-user to open the iPad's Settings menu and have the option of purchasing a short-term pre-paid plan from a Wireless Service Provider. If users so choose, they can buy a plan from Wireless Service Provider A, and subsequently they can buy a plan from Wireless Service Provider B or C, etc. Moreover, they can maintain active plans with multiple Wireless Service Providers, which is especially useful when traveling.

This marketplace for wireless connectivity saw uneven participation from the four major facilities-based U.S. Wireless Service Providers. Sprint and T-Mobile both fully adopted the switching concept and we strongly applaud their willingness to embrace new technology, distribution channels and competition. This willingness to challenge the status quo, leverage new technology and enter into direct competition is emblematic of John Legere's industry leadership and we

² 47 U.S.C. § 153(30) (2000)

³ Illari, Jonathan. "Market Effects of Mobile Number Portability: Verizon Wireless V. F.C.C." *Boston University Journal of Science and Technology Law* 10, no. 1 (2004).

emphatically support the new market dynamics catalyzed by his “Un-Carrier” campaign.

Verizon, on the other hand, chose not to participate in the Apple SIM program, but is undoubtedly assessing the opportunities associated with this new marketplace. Finally, AT&T did participate, but issued a warning indicating that when a user purchases AT&T service, the Apple SIM becomes permanently programmed to AT&T’s network. Should the user want to switch to T-Mobile or Sprint, they must purchase a new Apple SIM card.

AT&T’s deployment exemplifies the need for rules to ensure devices capable of switching networks are able to do so. Beyond the four major facilities-based Wireless Service Providers the U.S. is also home to regional facilities-based Wireless Service Providers and over 50 virtual Wireless Service Providers. As more of these Providers join the digital marketplace, it will become easier for Americans to experience their unique offerings and value propositions, resulting in greater competition and increased value derived from wireless spend by consumers and enterprises.

As the digital marketplace for Wireless Services grows, it is essential that no Wireless Service Provider is able to permanently burn its SIM profile into an unlocked device as this would introduce confusion among end-users and possibly cause some device manufacturers to re-think including the functionality in their products, both of which would slow the value creation unlocked by network switching technology.

We urge the Commission to create a task force to fully examine the possibilities unleashed by devices capable of switching cellular networks, the new types of marketplaces they generate, and how rulemaking by the FCC can fully unlock the value created by this new technology. We stand ready to assist the Commission as necessary.

Respectfully,

Samuel King and Ismaila Wane
Co-Founders of Simless, Inc.