

Before the
Federal Communications Commission
Washington, D.C. 20554

In the Matter of)
Edward Ryan,) EB Docket No. 14-219
Complainant,) File No. EB-14-MD-009
v.)
Cellco Partnership d/b/a Verizon Wireless,)
Defendant.)

ORDER

Adopted: May 21, 2019

Released: May 21, 2019

By the Chief, Enforcement Bureau

I. INTRODUCTION

1. In this proceeding, Edward Ryan (Ryan) filed a formal complaint alleging that Cellco Partnership d/b/a Verizon Wireless (Verizon) violated the Commission’s C Block Rules by providing an operating system update that caused the tethering application on his mobile phone to cease functioning. We find that the record contains no evidence that Verizon took any action causing Ryan’s difficulties. For this reason and the other reasons discussed below, we deny Ryan’s complaint.

II. BACKGROUND

A. Legal Framework

2. In 2007, the Commission established rules governing 700 MHz (C Block) wireless licenses, which had previously been used in analog television transmission. Wireless service providers that obtained licenses to C Block spectrum agreed to accept certain open-access obligations (C Block Rules). Under section 27.16(b) of the Commission’s rules, licensees may “not deny, limit, or restrict the ability of their customers to use the devices and applications of their choice on the licensee’s C Block network.” Further, section 27.16(e) prohibits each licensee from “disabl[ing] features on handsets it provides to customers.” A party alleging violation of the C Block Rules may institute a formal

1 See Complaint, File No. EB-14-MD-009 (filed July 1, 2014) (Complaint).

2 See In the Matter of Service Rules for the 698-746, 747-762, and 777-792 MHz Bands, Second Report and Order, 22 FCC Rcd 15289 (2007) (C Block Order).

3 See id. at 79, para. 195; Joint Statement, Tab A, Stipulated Findings of Fact, File No. EB-14-MD-009 (filed Oct. 7, 2014) (Stipulated Facts) at 2, para. 9.

4 See 47 CFR § 27.16(b).

5 See 47 CFR § 27.16(e).

Complaint proceeding under section 208 of the Act.⁶ Section 27.16(f) requires complainants to provide information sufficient to establish a *prima facie* case that a violation has occurred.⁷ Complaints are governed by the Commission's formal complaint rules, which require that all asserted facts be supported by relevant evidence.⁸

B. Factual Background and History of Ryan's Complaint

3. In November 2013, Complainant Ryan purchased a mobile phone (handset) configured to operate on the Verizon network.⁹ Specifically, Ryan purchased a Motorola Moto X running the Android Operating System (OS) developed by Google.¹⁰ Ryan used this device, *inter alia*, to wirelessly tether to his laptop computer, which he used to perform billable legal work while commuting.¹¹ Ryan used a wireless tethering application called "FoxFi" to enable other devices to use the Moto X's data connection.¹²

4. Defendant Verizon is a provider of wireless data service.¹³ Through an auction in early 2008, Verizon obtained licenses to C Block wireless spectrum and has used that spectrum to provide wireless service.¹⁴ Verizon provides service via phones made by Motorola and running the Android OS.¹⁵ Many third-party software developers design applications, including tethering applications, to operate under the Android OS on these phones, and Verizon invites application development for phones on its

⁶ See 47 U.S.C. § 208; 47 CFR § 27.16(f); C Block Order at 92 n.517.

⁷ See 47 CFR § 27.16(f).

⁸ See 47 CFR § 1.720 *et seq.*

⁹ See Stipulated Facts at 1-2, paras. 3-5, 7, 10, 11; Complaint at 2, paras. 7-9; Complaint, Exhibit B, Affidavit of Edward Ryan (Ryan Affidavit) at 1, paras. 2-4, 7; Answer of Cellco Partnership, File No. EB-14-MD-009 (filed Aug. 7, 2014) (Answer) at 3, paras. 7-9.

¹⁰ See *id.*; Stipulated Facts at 1-2, paras. 6, 14. The Merriam-Webster Learner's Dictionary defines an operating system as "the main program in a computer that controls the way the computer works and makes it possible for other programs to function." See Merriam-Webster Learner's Dictionary, available at <http://www.learnersdictionary.com/definition/operating%20system> (last visited May 1, 2018). "Third-party . . . applications . . . use various mechanisms of the Android operating system . . . on Android-based devices." Stipulated Facts at 3, para. 20.

¹¹ See Stipulated Facts at 1-2, paras. 1, 12, 18; Complaint at 3, paras. 12, 19-20; Ryan Affidavit at 3, paras. 16-17; Legal Memorandum of Edward Ryan, File No. EB-14-MD-009 (Aug. 18, 2014) (Reply Legal Memorandum), Exhibit B, Supplemental Affidavit of Edward Ryan at 1, para. 2. "'Tethering' refers to using a smartphone or other wireless device as a data modem to connect a notebook, laptop, personal computer or multiple such computers or devices to the device's wireless broadband data service . . . so that data from the tethered device can be routed through the tethering mobile device over the cellular network." Stipulated Facts at 2, para. 13.

¹² See Stipulated Facts at 2-3, para. 18; Complaint at 3, para. 11; Ryan Affidavit at 1, para. 6.

¹³ See Stipulated Facts at 1, paras. 2, 7; Complaint at 2, paras. 9-10; Answer at 3, paras. 9-10.

¹⁴ See Stipulated Facts at 2, para. 8; Answer at 3, paras. 9-10; *In the Matter of Cellco Partnership d/b/a Verizon Wireless*, Order (with attached Consent Decree), 27 FCC Rcd 8932, 8936, para. 3 (EB 2012) (Consent Decree); Auction of 700 MHz Band Licenses Closes; Winning Bidders Announced for Auction 73, Public Notice, DA 08-595, 23 FCC Rcd 4572 (2008).

¹⁵ See Stipulated Facts at 1-2, paras. 4-7, 10, 11, 14; Complaint at 2, paras. 8, 9; *id.* at 3, paras. 11, 13; Answer at 3, paras. 8, 9, 11; *id.* at 4, paras. 13, 15.

network.¹⁶ Verizon itself offers a proprietary Mobile Hotspot tethering application on a monthly subscription basis.¹⁷

5. Google periodically updates its Android OS, and Verizon deploys those software updates over the air (OTA) to devices on its network.¹⁸ In November 2013, Verizon delivered an OTA update that upgraded the operating system of the Moto X to Google's Android OS 4.4 (KitKat).¹⁹ Ryan asserts that, following that OTA update, he was unable to perform wireless tethering on his Moto X using FoxFi.²⁰ Ryan filed a formal Complaint alleging violations of the C Block rules and seeking damages to compensate him for the hours he spent commuting but unable to perform billable work.²¹

III. DISCUSSION

6. In his Complaint, Ryan alleges that Verizon restricted him from using the application of his choice in violation of 47 CFR § 27.16(b) and disabled his device's tethering feature in violation of 47 CFR § 27.16(e).²² Ryan contends that Verizon controls the content of its OTA updates²³ and that Verizon specifies the software and configurations provided with the installation of the updated OS, which is deployed by Verizon's OTA updates to users' handsets.²⁴ As in any section 208 proceeding, the complainant "has the burden of proof in establishing a violation of the Act."²⁵

¹⁶ See Answer, Tab E, Ex. 3, Declaration of Samir Vaidya (Vaidya Declaration) at 2-3, paras. 5-7; *id.*, Tab E, Ex. 4, Declaration of Vijayanand Paulrajan (Paulrajan Declaration) at 3, paras. 6, 8; Opening Brief of Edward Ryan, EB-14-MD-009 (filed Feb. 16, 2018) (Ryan Opening Brief), Exhibit G at 3.

¹⁷ See Complaint at 5, para. 31; *id.* at 13, para. 47(i); Answer at 8, para. 31; *id.* at 13, para. 47.

¹⁸ See Stipulated Facts at 2, paras. 15, 17; Complaint at 3, para. 16; Answer at 4, paras. 15-16; Paulrajan Declaration at 2-3, paras. 6, 8; Ryan Opening Brief, Exhibit G at 3; Verizon's Amended Responses to Complainant's Interrogatories and Document Requests, File No. EB-14-MD-009 (June 17, 2016) (Verizon Interrogatory Responses) at 2-3.

¹⁹ See Stipulated Facts at 2, para. 17; Complaint at 3, para. 13; Ryan Affidavit at 2, para. 7; Answer at 4, para. 13.

²⁰ See Stipulated Facts at 2-3, paras. 18-19; Complaint at 3, paras. 11, 14; Ryan Affidavit at 1, para. 6; *id.* at 2, para. 8. Verizon does not contest this allegation and notes that the website for the FoxFi application indicates that, as of August 2014, the applications was not supported on certain devices, including the Moto X. See Answer at 4, para. 14; Letter from David Haga, counsel to Verizon to Marlene Dortch, Secretary, Federal Communications Commission, File No. EB-14-MD-009 (filed Mar. 22, 2019) (PdaNet+FoxFi Usage Guidant).

²¹ See Stipulated Facts at 3, para. 23. See generally Complaint. In a statement accompanying the Complaint, Ryan suggested that "[t]he F.C.C. can open an administrative proceeding or investigation." Ryan's Statement of Disputed Facts, File No. EB-14-MD-009 (filed Oct. 7, 2014) at 3, para. 23. Following these submissions, the Commission's Investigations and Hearings Division investigated Verizon based on Ryan's claims, thereby delaying the Complaint proceeding. Subsequently, the parties also suspended the proceeding and engaged in a lengthy but unsuccessful period of mediation supervised by Commission staff. See Letter Ruling, File No. EB-14-MD-009 (filed Apr. 20, 2017) (commencing mediation); Letter Ruling, File No. EB-14-MD-009 (filed Jan. 25, 2018) (terminating mediation).

²² See generally Complaint; Final Brief of Defendant Cellco Partnership d/b/a Verizon Wireless, File No. EB-14-MD-009 (filed Mar. 9, 2018) (Verizon Opposition Brief) at 2, 7.

²³ See Complaint at 3, para. 15.

²⁴ See *id.* at 5, paras. 35-36. But see *id.* at 6, paras. 27-38 (apparently narrowing that claim).

²⁵ *America's Choice Communications, Inc v. LCI Int'l Telecom Corp.*, 11 FCC Rcd 22494, 22497, para. 8 (Com. Car. Bur. 1996). See 47 U.S.C. § 208; 47 CFR § 27.16(f). See, e.g., *Directel, Inc. v. Am. Tel. and Tel. Co.*, Memorandum Opinion and Order, 11 FCC Rcd 7554, 7560-61, paras. 14-15 (Common Carrier Bur. 1996); *Amendment of Rules Governing Procedures to be Followed when Formal Complaints are Filed Against Common Carriers*, Report and Order, 12 FCC Rcd 22497 (1997); *Amendment of Rules Concerning Procedures to be*

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A. Ryan has not established that Verizon violated 27.16(b)

7. Ryan claims that Verizon is culpable for the failure of his FoxFi application merely because Verizon deployed the OTA update to Google's Android OS.²⁶ But our rules are clear that Verizon is free to choose its own OS—which may not support all applications—and deploy OS updates.²⁷ Indeed, neither the C Block Rules nor the Consent Decree “obligates Verizon Wireless to take affirmative steps, such as . . . to make any particular Application available to its customers on the [C Block] Network or to design the devices it offers customers to work with or accommodate any particular Application.”²⁸ Thus, Verizon had no obligation to ensure compatibility between the Android OS and FoxFi or any other third-party application.²⁹ Even the availability of an Android application to C Block subscribers does not guarantee that it will work on all Android devices or suggest that Verizon is responsible for making the application work on particular Android devices attached to its network.

8. Ryan's argument—that Verizon unlawfully restricted him from using the application of his choice because the FoxFi tethering application on his Moto X phone ceased to operate once he installed the Android OS update—must therefore fail.³⁰ C Block Rule 27.16(b) provides that licensees such as Verizon “shall not deny, limit, or restrict the ability of their customers to use the devices and applications of their choice on the licensee's C Block network.”³¹ It is undisputed that Ryan had a phone on the Verizon network,³² and that Ryan's preferred tethering application ceased to operate.³³ But Ryan has not demonstrated on this record that Verizon—the licensee—made or influenced any change to Ryan's device that caused Ryan's preferred tethering application to cease functioning.³⁴ Put simply, the record lacks any evidence—even after discovery—to support Ryan's claim.

9. The parties identified five entities that could affect the operation of the FoxFi wireless tethering application: Google, Motorola, Ryan, Verizon, and the makers of FoxFi.³⁵ According to Ryan, the event that triggered the application's failure was deployment of an OTA update developed by

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Followed when Formal Complaints are Filed Against Common Carriers, Report and Order, 8 FCC Rcd 2614 (1993). See generally 47 CFR §§ 1.720–1.735.

²⁶ See Reply Legal Memorandum at 7.

²⁷ See C Block Order at 90 n.502. Generally, device manufacturers and service providers are permitted to make technological updates and advancements. See C Block Order at 90, paras. 223-24; *id.* at 97-98, para. 242. See also Stipulated Facts at 2, para. 16.

²⁸ *Id.* at 8940, para. 13(c). See generally C Block Order.

²⁹ See C Block Order at 90 n.502 (affirming that wireless service providers “are not required to modify their . . . device-level operating systems to accommodate particular devices or applications”).

³⁰ See Ryan Opening Brief at 12-13; Reply Brief of Edward Ryan, File No. EB-14-MD-009 (filed Mar. 16, 2018) (Ryan Reply Brief) at 6.

³¹ 47 CFR § 27.16(b). A consent decree in 2012 required that Verizon shall not “take any actions to deny, limit, or restrict the ability of its customers to use the Applications of their choice on Verizon Wireless's C Block network.” See Consent Decree, 27 FCC Rcd at 8936, 8940, paras. 4, 13. The Consent Decree settled an investigation into alleged C Block Rules violations around Verizon's request that an application store operator remove third-party tethering applications from its app store. See *id.* at 8936, para. 4. Compare *id.* with C Block Order at 79, para. 195.

³² See note 9, *supra*.

³³ See Stipulated Facts at 2-3, paras. 18-19; Complaint at 3, paras. 11, 14; Ryan Affidavit at 1, para. 6; *id.* at 2, para. 8.

³⁴ For this reason, Ryan's references to the previous Consent Decree concerning Verizon and tethering applications are also of no moment. See, e.g., Ryan Opening Brief at 15, para. 56.

³⁵ See Ryan Opening Brief at 5, 14, 15; see generally Ryan Opening Brief.

Google.³⁶ Google regularly updates its Android OS software, on which third-party applications such as FoxFi depend.³⁷ The makers of FoxFi, for their part, indicated that their application was incompatible with Android OS 4.4 on several service providers' phones—not just Verizon's—and they assigned no blame for that lack of compatibility.³⁸

10. In pointing the finger at Verizon as the source of his wireless tethering problems, Ryan alleges that neither Google nor Motorola made any changes that could be the cause.³⁹ He bases this claim on a “review of documents related to the Android KitKat OS update” that does “not reveal any changes” either entity made that might have that effect.⁴⁰ But the same can be said of Verizon, which also has not published any materials indicating that it caused FoxFi to cease operating. Indeed, Ryan admits that “[n]owhere in Verizon’s 2014 user manual for the Moto X handset is there any suggestion that users’ wireless tethering feature is restricted.”⁴¹ Further, Ryan’s argument here assumes both that Google and Motorola fully disclosed all relevant changes in their published materials and that Ryan fully comprehends the description of changes they have published. Assumptions do not constitute proof, and Ryan failed to cite any expert or other witness supporting his interpretation of these technical documents.

11. Ryan alleges several other bases for finding a violation of 47 CFR § 27.16(b), but each is unpersuasive. First, Ryan alleges that after the OS update, at least some device holders who attempted to use FoxFi were directed to a subscription page for Verizon’s paid tethering service, and that this shows Verizon was causing FoxFi to fail so Verizon could gain paid subscriptions for its own branded service.⁴² But Ryan’s claim here is unavailing, since the Commission’s “rules in no way limit the licensee in the Upper 700 MHz C Block from offering its preferred applications to its customers.”⁴³ Second, Ryan argues that the wireless tethering feature was enabled by Google in the Moto X by default but that Verizon disabled it, and that “[t]his was true before the OTA update and afterward.”⁴⁴ Ryan claims that this disabling makes Verizon’s imposition of a subscription fee to use its own Mobile Hotspot application a “denial, limitation, or restriction of a user’s ability to use the device and applications of their choice.”⁴⁵ But Ryan’s claim is self-defeating, since Ryan states that Verizon had already disabled this feature “before the OTA update,” even while Ryan acknowledges that FoxFi had operated properly on his device before the OTA update.⁴⁶ Third, Ryan criticizes Verizon’s failure to warn him about the impact the

³⁶ See Stipulated Facts at 2-3, paras. 18-19; Complaint at 3, paras. 11-14; Ryan Affidavit at 2, paras. 7-8; Ryan Opening Brief, Exhibit G at 3; Answer at 4, paras. 13, 15-16; Verizon Interrogatory Responses at 2-3; Vaidya Declaration at 2-3, paras. 5-7; Paulrajan Declaration at 2-3, paras. 6, 8.

³⁷ See Stipulated Facts at 2, paras. 14, 15, 17; Vaidya Declaration at 2-3, paras. 5-8; Paulrajan Declaration at 1-3, paras. 2, 6, 8.

³⁸ See Answer at 4, para. 14; PdaNet+FoxFi Usage Guidant (stating that both Verizon Motorola phones and AT&T Samsung phones were incompatible with Android OS 4.4); Answer at 4, para. 14; Vaidya Declaration at 3, para. 8.

³⁹ See Ryan Opening Brief at 6, 12, 16, paras. 23, 46, 63-64.

⁴⁰ *Id.* at 8, para. 23.

⁴¹ *Id.* at 8, para. 24.

⁴² See Complaint at 6, para. 38; Ryan Affidavit at 2, para. 10; Ryan Opening Brief at 7, 15-16, paras. 27-28, 58.

⁴³ See C Block Order at 87, para. 217.

⁴⁴ Ryan Reply Brief at 5.

⁴⁵ *Id.*

⁴⁶ Complaint at 3, paras. 11, 14; Ryan Affidavit at 1-2, paras. 6, 8. See also Stipulated Facts at 3, para. 21.

update would have,⁴⁷ but Verizon could not have warned Ryan since it did not know which applications, if any, would break with the update.⁴⁸

12. Ryan's failure to establish that Verizon caused FoxFi to cease operating is determinative.⁴⁹ Ryan simply has not offered evidence that could support a *prima facie* case of a section 27.16(b) violation, while Verizon has refuted that claim.⁵⁰ Indeed, Verizon offered evidence that it did nothing to affect Ryan's device's tethering capability or to block tethering applications, that it did not request those changes, and that it does not control the evolution of the Android OS or the selection of features to be included.⁵¹ Similarly, the record contains evidence that Verizon did not know until after the OTA update was deployed that the update would impair the operation of FoxFi.⁵²

B. Ryan has not proved that Verizon violated Section 27.16(e)

13. Ryan also argues that Verizon disabled aspects of his device's tethering feature, which he claims would violate section 27.16(e)'s injunction that a licensee not "disable features on handsets it provides to customers."⁵³ But following our analysis in section III.A, we likewise find here that Ryan has failed to prove that Verizon is responsible for disabling his device's tethering feature. To the contrary, as described above, Verizon has adduced evidence that it did not disable his wireless tethering feature.⁵⁴ Further, both parties indicate that some tethering *applications* continued to operate or resumed operation even after the OTA update.⁵⁵ Recognizing this, Ryan claims that the word "disabled" in section 27.16(e)

⁴⁷ See Complaint at 3, 9, paras. 18, 47(h); Reply Legal Memorandum at 8; Ryan Opening Brief at *passim*.

⁴⁸ See notes 52-53, *infra*.

⁴⁹ Perhaps recognizing this, Ryan asserts the doctrine of *res ipsa loquitur*. See Ryan Opening Brief at 17, para. 67. This argument was not raised in the Complaint. While that doctrine has, at times, been adapted from tort law into a regulatory dispute (see, e.g., *Amer. Meat Institute v. U.S. Dept. of Ag.*, 760 F.3d 18, 26 (D.C. Cir. 2014)), Ryan cites no authority for applying it here. In any event, Ryan has failed to prove that, in the absence of evidence, Verizon is the only reasonably determined cause for the failure of his preferred wireless tethering app.

⁵⁰ As Ryan has failed to make a *prima facie* case, we need not address his suggestion that, since he has made such a case, Verizon may justify its actions only by proving them to be in furtherance of reasonable network management. See Ryan Reply Brief at 3 (citing 47 CFR § 27.16(f)).

⁵¹ See Answer at 12, para. 47(h); Vaidya Declaration at 3, paras. 7, 9, 10; Paulrajan Declaration at 2-3, para. 6; Verizon Interrogatory Responses at 2-3.

⁵² See *id.* The record also shows that Verizon "generally does not participate in the process of deciding what third party applications to support in an operating system" except where it is "providing input necessary to support one of its own applications." See Verizon Interrogatory Responses at 2-3; Stipulated Facts at 2, paras. 14, 15; Vaidya Declaration at 2-3, para. 6; Paulrajan Declaration at 2-3, paras. 6-7. Based on the record in this case, Verizon's only influence on the content of Google's updates is to ensure that the Verizon's proprietary applications will continue to operate. See Stipulated Facts at 2, paras. 14-15; Answer at 4, para. 15; Paulrajan Declaration at 2-3, paras. 3-8; Verizon Interrogatory Responses at 2-3.

⁵³ 47 CFR § 27.16(e); Complaint at 8, para. 47(f). Ryan describes the allegedly disabled feature in various ways including "3rd party wireless tethering applications," "wireless tethering," and "the WiFi tethering function." See, e.g., Complaint at 8-9; Ryan Opening Brief at 14, para. 54.

⁵⁴ See notes 52-54, *supra*.

⁵⁵ See Complaint at 5, para. 31; Answer at 8, para. 31; Vaidya Declaration at 2-3, paras. 4, 6, 10; Verizon Interrogatory Responses at 3; Answer at 4, para. 14; PdaNet+FoxFi Usage Guidant (stating that Verizon HTC phones operated FoxFi on Android OS 4.4); Ryan Opening Brief at 4-5, 7, 14, paras. 16, 28, 54; Verizon Opposition Brief at 16-17; Ryan Reply Brief at 4-5. Ryan even acknowledges that his device retained at all times "the capability to wirelessly tether." See Complaint at 5, para. 31; Vaidya Declaration at 3, para. 10; Ryan Opening Brief at 14, para. 54. Ryan does claim, though, that Verizon imposed a \$20 monthly charge to enable wireless tethering and that the "WiFi tethering function" was at some point disabled. See Ryan Opening Brief at 14, para. 54. These

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should be read to encompass changes that impair only some applications from utilizing the device's wireless tethering capability.⁵⁶ But applying this definition of "disabled" may render section 27.16(e) virtually redundant to Section 27.16(b), since claiming that an OS change disabled a very narrowly defined feature may be just another way of saying that aspects of certain applications were affected, as opposed to a true device feature being affected.⁵⁷ We need not interpret that term, in any event, since Ryan has failed to prove any action *by Verizon* to disable or otherwise limit his device or any of its features or applications.⁵⁸

IV. ORDERING CLAUSE

14. On this record, Verizon did not cause Ryan's difficulty.⁵⁹ Accordingly, **IT IS ORDERED** that, pursuant to sections 4(i), 4(j), 201, 202, 208, 301, 303, 304, 309, 316, and 332 of the Communications Act, 47 U.S.C. §§ 154(i), 154(j), 201, 202, 208, 301, 303, 304, 309, 316, and 332 and sections 0.111, 0.311, 1.720-1.735, 27.16(b), and 27.16(e) of the Commission's rules, 47 CFR §§ 0.111(a), 0.311, 1.720-1.735, 27.16(b), and 27.16(e), Ryan's Complaint **IS DENIED**.

FEDERAL COMMUNICATIONS COMMISSION

Rosemary C. Harold
Chief
Enforcement Bureau

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claims, Ryan alleges, constitute disabling the feature, even while other forms of tethering "may still have functioned." *See id.*

⁵⁶ Complaint at 5, paras. 30-31; Ryan Opening Brief at 14-15, paras. 54-55; Ryan Reply Brief at 4-5.

⁵⁷ The inability of a particular tethering application to function after an OS update may be fundamentally different than disabling a feature on a device.

⁵⁸ Ryan would not prevail even under his suggested interpretation of "disabled." Regardless whether Ryan's interpretation defines a violation of 27.16(e) or merely restates the 27.16(b) claim addressed in *supra* Section III.A, his claim cannot succeed for lack of evidence.

⁵⁹ Subsequent to the difficulties of which Ryan complains, at least some Verizon customers were able to resume using FoxFi on their Android devices. In some instances, affected application developers modified their applications to allow tethering applications to work on the updated Android OS. *See Verizon Interrogatory Responses* at 3; Ryan Opening Brief at 6-7, paras. 26, 28; Edward Ryan's Responses to Verizon's Interrogatories, File No. EB-14-MD-009 (June 17, 2016) at 2, para. 8.