



1300 I Street, NW
Suite 500 East
Washington, DC 20005

Christopher D. Oatway
Associate General Counsel
Federal Regulatory and Legal Affairs

O: 202.515.2470
christopher.d.oatway@verizon.com

February 28, 2020

G. Patrick Webre
Bureau Chief
Consumer and Governmental Affairs Bureau
Federal Communications Commission
445 12th Street, S.W.
Washington, D.C., 20554

Re: *Advanced Methods to Target and Eliminate Unlawful Robocalls*, CG Docket No. 17-59; *Call Authentication Trust Anchor*, WC Docket No. 17-97

Dear Mr. Webre:

Your letter to Verizon's CEO, Hans Vestberg asked for details about Verizon's robocall blocking activities and for information about the effectiveness of various blocking measures.¹ Verizon is committed to robust robocall blocking to help restore our customers' trust in voice calls. The Commission's June 2019 order authorizing default call blocking has proven to be a hugely impactful consumer protection policy, bringing substantial benefits to tens of millions of Verizon customers.

Availability of Call Blocking Tools

You asked about Verizon's call blocking tools, including about any changes we have implemented since June 2019. The number of Verizon wireless subscribers using our "Call Filter" blocking tool² has surged from a few million in June 2019 to tens of millions. Verizon

¹ Last month Verizon filed comments ("Verizon Initial Comments") in response to the Commission's Public Notice asking for information about our blocking program. *See Consumer and Governmental Affairs Bureau Seeks Input for Report on Call Blocking*, Comments of Verizon on Public Notice, CG Docket No. 17-59, Public Notice, WC Docket No. 17-97 (January 29, 2020).

² *See Verizon, Solutions and Services: Call Filter*, <https://www.verizonwireless.com/solutions-and-services/call-filter/>.

continues to auto-enroll millions more weekly, automatically blocking calls identified as potential fraud (i.e., calls that our algorithms identify as likely to be illegal) and informing customers through text messages about the new blocking feature. The Call Filter app presents customers with options to adjust what types of calls are blocked, and to easily opt out of the tool altogether. We also inform customers about the risk that legitimate, wanted calls might potentially get blocked, along with their options to set their preferred level of protection.

Verizon was the first carrier to offer its customers free spam blocking services beyond fraud. To facilitate that, our tool allows customers to configure blocking to meet their preferences: the default setting blocks only high risk, potential fraud calls but they can adjust the setting to also block medium risk (potential spam) and/or lower risk (generally, other possible nuisance) calls. Customers also have the ability to block all incoming international calls, protecting them against scams like the Wangiri “one ring” scam.

Verizon’s Call Filter blocking service is available at no additional charge to all postpaid customers with compatible smartphones (which is the great majority of our total customers). We have also recently begun providing blocking in the network of high risk spam calls for customers whose phones do not support the Call Filter app, and we will continue to expand the reach of our blocking services. And in the coming months, we will both expand our base of customers with access to the Call Filter tool and announce improvements to the Call Filter call blocking experience.

We also provide our wireline customers with substantial robocall protections, and plan to offer them more protections in the future. Verizon first deployed its free “Spam Alerts” robocall labeling service to wireline customers in early 2018, becoming the first wireline service provider to provide meaningful robocall protections to wireline customers served over all types of facilities (copper as well as fiber).³ Spam Alerts is available at no additional charge to all wireline voice customers with Caller ID, and it displays “SPAM?” before a caller’s name if the calling number matches certain criteria designed to identify likely spam. And a majority of Verizon’s wireline customers are in service areas where they can sign up for Nomorobo, which provides a free blocking service using the simultaneous ring feature available to customers who use Voice over Internet Protocol (VoIP) service. Verizon informs its Fios Digital Voice customers, who receive the simultaneous ring feature for free, about the Nomorobo option.

You also asked whether Verizon engages in “network blocking.” The short answer is yes: we protect our customers both through smartphone apps and network functionality. As

³ See *SPAM? Verizon gives you a new tool to avoid those pesky robocalls with new Caller ID feature*, Verizon News (April 16, 2018), <https://www.verizon.com/about/news/block-spam-robocalls-with-verizon-new-tool>.

discussed in our initial comments in response to the Public Notice, Verizon's robust network blocking program has blocked millions of calls where the calling party number is invalid, unassigned, or where the person to whom the number was assigned has authorized the block.⁴ These blocking activities are based on the Commission's November 2017 order that allowed blocking in the network that is neither opt-in nor opt-out.

Effectiveness of Call-Blocking Tools

You asked for information about the accuracy of our blocking. Verizon uses a variety of techniques, including customer crowd-sourced feedback, feedback from calling parties, and "honeypot" data, to evaluate the effectiveness of our call blocking and to refine our tools. The data indicate that Verizon's blocking and labeling algorithms are rarely wrong when identifying incoming calls as spam, but that they let through more spam calls than we and our customers want. While it is very frustrating that bad calls continue to make it through our filters without being identified as spam, we have to be careful not to block good, wanted calls. One step we are taking to improve blocking is incorporating feedback from both customers and calling parties into our algorithms.

Here is how that feedback process works. For all calls blocked by the Call Filter app, Verizon sends the calls to voicemail. We encourage customers to review missed calls and voicemail and provide us with feedback on any wanted calls that were identified as spam ("false positives"). We also encourage customers to use the Call Filter app to report false negatives (failures to identify spam calls as spam). And our feedback website invites both calling parties and called parties to tell us about calls that they believe are treated incorrectly.⁵ Incorporating this customer feedback helps us to evaluate rates of false positives and false negatives.

The data show that the rate of false positives for Call Filter is low. For example, as TNS reported last month, less than 0.2% of originating numbers are reported as having falsely been labeled as negative calls.⁶ We similarly have not received feedback from calling parties indicating that substantial numbers of our blocking or labeling determinations are incorrect. On

⁴ See Verizon Initial Comments at 3.

⁵ See Verizon, *Verizon spam feedback*, <https://www.voicespamfeedback.com/vsf/>.

⁶ See *Consumer and Governmental Affairs Bureau Seeks Input for Report on Call Blocking*, Comments of Transaction Network Services, CG Docket No. 17-59, Public Notice, WC Docket No. 17-97, at 13 (January 29, 2020).

the other hand, the rate of false negatives is substantially higher. That is partly a function of robocallers (both legal and illegal) increasingly using strategies to bypass call blocking and labeling tools, such as using new numbers as soon as their existing numbers start to trigger spam classifications.

Another reason for the relatively high ratio of false negatives compared to false positives is that we calibrate our blocking experience to err on the side of not blocking calls that may be wanted. We could potentially block a larger number of unwanted calls to reduce the false negative rates, but doing so would risk increasing the number of wanted calls that are blocked. We routinely evaluate the data to achieve the right balance.

You also asked whether Verizon sends an intercept message when it blocks calls. Verizon sends Release Code 603 (“denied”) for calls that it blocks in the network under the Commission’s November 2017 order so that the originating carrier and/or the caller are aware of the blocks. We also send daily automated emails to our upstream wholesale customers to inform them of the top ten invalid numbers that were blocked to educate them about the scope of the problem and the need to promote calling best practices that use valid phone numbers. We have found that a substantial amount of traffic that does not appear to be illegal is sent with invalid numbers, so educating callers and service providers about the November 2017 order and the blocking of invalid numbers is important.

We do not send intercept messages for calls blocked through our Call Filter app. Instead, Verizon avoids false positives and ensures that wanted calls are not blocked by using the feedback mechanisms described above. Sending an intercept message every time a call is blocked using the Call Filter app would likely create confusion and not provide useful feedback for calling parties. For example, calls blocked via the Call Filter app are actually terminated to the device, and then within the device are sent to voicemail; we do that in case a legitimate call is inadvertently blocked, in which case the customer may want to receive the voicemail. In that scenario, as opposed to the calls blocked using network functionality, sending a release code would not accurately describe what happened. We also do not want to help calling parties game the system by allowing them to monitor intercept messages and immediately change their calling party numbers.

Finally, you asked about whether and how our blocking practices differentiate between legal and illegal calls, and whether we have collected evidence on whether call blocking tools have reduced the number of illegal calls transiting our networks. Our ability to use analytics to

identify illegal calls is limited, and we do not have sufficient information with which to quantify illegal calls.

Impact of FCC Actions

Consumers have benefited greatly from the Commission's orders authorizing more robust blocking. The Commission's June 2019 order is what allowed us to deploy our Call Filter service to tens of millions of additional customers since last summer. And many of the tens of millions of customers for whom Verizon blocked calls pursuant to the Commission's November 2017 order likely would have been fallen victim to fraud but for our success in helping to address the impersonation scams and other fraud associated with calls spoofing government agencies' phone numbers. That robust blocking, especially those that we initiated in partnership with the Social Security Administration and the Internal Revenue Service, takes advantage of the green light to block invalid and "Do Not Originate" numbers that the Commission has provided.⁷

You also asked whether Verizon has implemented the "white list blocking" described in the June 2019 order. We have for many years provided a "Do Not Disturb" feature at no extra cost to our wireline Fios Digital Voice Customers that blocks all incoming calls except for ones from numbers that the customer exempts from the list. And our wireless Call Filter customers can use the contact list provided by the smartphone manufacturer as a white list to prevent certain callers from being blocked. We also offer our customers the ability to create a restricted white list for calling/texting with the "Just Kids" plan using our Smart Family service or through the Gizmo watch. For example, a parent can establish a list of up to 20 contacts on Just Kids and 10 contacts on Gizmo that a child can call/text. All other calls/texts are blocked from reaching the child's device.

Impact on 911 and Public Safety

Verizon agrees with the Commission and other stakeholders that we must be careful not to block emergency calls. We are not aware of any instance in which our blocking programs have blocked an emergency call. First, we are not aware of any network configuration whereby a call to 911 might be blocked by any of Verizon's blocking tools or programs. Second, we and

⁷ See Verizon Public Notice Comments at 3.

our analytics providers take various steps to avoid blocking calls from emergency callers. For example, our third-party provider of analytics for Call Filter (TNS) includes emergency numbers in those identified as per se wanted, which means they are never blocked. We are committed to strengthening emergency caller protections, including by engaging with the emergency calling community and other stakeholders on best practices and on educational efforts to ensure that all relevant stakeholders understand how call blocking works and what practices (such as using invalid numbers) may put their calls at risk.

Earlier this month, representatives from Verizon and TNS spoke on a call blocking panel at a conference hosted by the National Emergency Number Association (NENA). That is part of our commitment to engage with the emergency caller community both to educate them about the importance of good call hygiene (e.g., not using invalid numbers) and to collaborate on ways to improve analytics providers' ability to avoid misidentifying emergency calls as spam. We are committed to continuing to collaborate with all relevant stakeholders to ensure that our efforts to restore trust in voice calls do not have harmful unintended results.

Unfortunately, we have seen anecdotally that some calling parties making important calls are unaware of the Commission's determination in November 2017 that calls from invalid numbers are presumptively illegal. For example, last year Verizon learned that some non-emergency calls that a hospital was making to its patients or their families were triggering the "Potential Spam" classification in Call Filter because the hospital was making calls from invalid numbers under the North American Numbering Plan. The "Hospital Protection Working Group" established by Section 14 of the TRACED Act may be able to help with outreach and educational efforts on this issue.

Blocking tools are now widely deployed. But our blocking program is still in its infancy, with improvements needed and in the pipeline. Verizon is committed to continuing to refine and improve our blocking programs and to work with all stakeholders (including legitimate calling parties and the emergency calling community) to ensure that wanted and necessary calls are not inadvertently blocked.

Verizon also is committed to continuing to address the robocall problem on other fronts, including deploying call authentication, by working with the industry to trace back and shut

G. Patrick Webre
February 28, 2020
Page 7 of 7

down illegal robocall campaigns, and by working with the Commission and others on “know your customer” and other programs to make sure that service providers cannot look the other way when their customers send large volumes of spam calls. The tide is turning on illegal robocallers and Verizon is committed to continuing to lead the charge.

Sincerely,

A handwritten signature in black ink that reads "Christopher Oatway". The script is cursive and fluid, with the first name and last name clearly legible.

Christopher D. Oatway