

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

In the Matter of )  
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Rural Call Completion ) WC Docket No. 13-39  
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**COMMENTS OF VERIZON AND VERIZON WIRELESS<sup>1</sup>**

It would be a mistake for the Commission to take a step backwards in this proceeding and now force carriers to report meaningless data. To the extent there is ambiguity in the *Order*<sup>2</sup> with what constitutes an “answered” call, the Commission should resolve it in favor of the “release cause code” methodology set forth in Appendix C, which more closely measures what actually matters – i.e., whether an originating or intermediate carrier is properly delivering calls to a terminating carrier or terminating tandem.

Whether a call is actually picked up by the called party says nothing about whether an originating or intermediate carrier properly delivered the call. As a result, the Commission should abandon its narrow focus on whether a call is literally answered – an approach that ignores and casts unwarranted suspicion on numerous unanswered calls, notwithstanding reliable evidence of proper call delivery. Although relying on release cause codes to identify call delivery issues has some limitations, this approach does identify relevant data – and given the choices, the Commission should stay the course and

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<sup>1</sup> In addition to Verizon Wireless, the Verizon companies participating in this filing are the regulated, wholly owned subsidiaries of Verizon Communications Inc. (collectively “Verizon”).

<sup>2</sup> *Rural Call Completion*, Report and Order and Further Notice of Prepared Rulemaking, 28 FCC Rcd 16154 (2013) (“*Order*”).

collect the data as set forth in Appendix C. Any modification of the *Order* to require the reporting of different data – whether in lieu of or in addition to release cause code data in Appendix C – would need to be accompanied by additional time for providers to implement these changes.<sup>3</sup>

## DISCUSSION

### I. The Commission Should Seek Data on Call Delivery Instead of Call Answer Rates.

In the *Order*, the Commission made clear that the reporting requirements were intended to allow the Commission to “monitor the *delivery* of long-distance calls to rural areas.”<sup>4</sup> In other words, the key inquiry is whether the originating or intermediate provider routed the call to the correct destination, which is either a terminating carrier (e.g., the RLEC) or a terminating tandem. After the call is handed off to the terminating carrier or tandem, the originating or intermediate carrier has done its job and relinquishes all control over the call’s routing. At that point, whether the call is actually answered depends on the terminating carrier’s accurate delivery to the correct end user and whether the end user picks up the phone or employs answering technology.

To accomplish the Commission’s objective, the Reporting Template in Appendix C indicates that a call attempt signaled with SS7 protocol is to be considered “answered” if the SS7 REL (release) message contains a release cause code of 16 (normal call clearing) or 31 (normal, unspecified). It may be true that some calls receiving these release cause

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<sup>3</sup> As the Commission recognized, it is important that providers have “flexibility to report [] data based on their own network configurations.” *Order* ¶ 71. Because Verizon’s wireline and wireless units capture call data differently, the Commission should avoid any action here that decreases or eliminates the *Order*’s flexibility.

<sup>4</sup> *Id.* ¶ 2 (emphasis added).

codes may not literally be picked up by the called party or an answering service/machine. Yet that does not mean that the calls were not delivered appropriately by the originating or intermediate provider – and thus should not be counted. To the contrary, calls carried over Verizon’s networks almost always are appropriately delivered to all terminating providers, regardless of how they are routed. Accordingly, it would make little sense for the Commission to modify Appendix C to exclude calls with release cause codes 16 or 31, thus *decreasing* the relevant data the Commission will receive.

Whether or not a call is actually answered by the called party has little probative value in determining whether call delivery issues exist to that call’s destination. Call answer rates are influenced by calling and called party demographics and behavior and terminating provider delivery, which can vary significantly. Verizon recently performed studies of nearly 40 rural operating company numbers (OCNs) that had below average call answer rates (based on call answer messages in the SS7 signaling stream) in the second half of 2013. Verizon’s investigations, which included milliwatt testing, analyzing call detail records, and placing manual test calls, took two months to complete, and revealed *no* issues with Verizon’s or Verizon’s intermediate providers’ delivery of calls to these OCNs. In other words, each OCN identified as problematic from call answer data was a “false positive,” and investigating these OCNs diverted resources from other OCNs that may be experiencing issues.

Verizon found that the low answer rates in these OCNs tended to be caused by frequent calls to unallocated numbers (which often did not receive the correct release cause code from the RLEC) and calls from what appeared to be autodialers. Other factors that are likely to influence an OCN’s call answer rate include the prevalence of lines that have

answering technology (e.g., voicemail); the proportion of residential customers to business customers; and an RLEC's volume of available (unallocated) numbers resulting from obtaining numbers in blocks of 10,000, but serving far fewer customers.

Furthermore, Verizon analyzed unanswered calls that received a release cause code of 16 or 31 and found that they are almost always properly delivered to the terminating RLEC or tandem. When Verizon placed manual test calls to these numbers, the test calls reached the terminating RLEC switch. Nearly 90% of the test calls to numbers associated with unanswered calls reached either an unallocated number recording from the RLEC switch, were answered, or were ring-no answer. For these calls, Verizon utilized SS7 call-trace equipment to monitor the exchange of signaling information in real-time and to confirm that signaling messages, release cause codes, and call treatments, were coming from the terminating carrier or tandem provider and not an intermediate provider.

Instead of focusing on answered calls, a more effective approach is to look at release cause codes that indicate the successful delivery of the call by the originating or intermediate provider. The Network Effectiveness Ratio (NER) is a measure that attempts to capture these calls. Relying on release cause codes – such as 16 and 31 – that indicate successful delivery of the call to categorize call attempts removes extraneous, non-controllable factors from the equation.<sup>5</sup>

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<sup>5</sup> Other release cause codes are similarly indicative of successful call delivery. Recognizing this, the Commission requires covered providers to report three categories of unanswered calls: unassigned number, ring no answer, and busy. The first category results from the calling party's conduct (i.e., dialing a number that is not assigned to an end user), while the remaining categories reflect called party conduct (i.e., not picking up the phone or deploying answering technology or being on the phone at the time of the call). Nonetheless, all three are indicative of proper call delivery by the originating or intermediate provider.

When Verizon calculated the NERs for the nearly 40 rural OCNs discussed above, around 60% had NERs in the same range as, if not better than, the NER for Verizon's calls to non-rural OCNs. In other words, using NER eliminated more than half of the "false positives" identified by using call answer rate. While using NER is not perfect in identifying OCNs with issues, it is a significant improvement in narrowing the inquiry.<sup>6</sup> Verizon also observed that the NER has no apparent relationship to call answer rates: some of the OCNs with the lowest call answer rates had very high NERs. As a result, the Commission would identify different OCNs as potentially problematic, depending on the data it collects and the metric it uses.

The Commission recognized the value of analyzing NER in the *Order*. The Commission expressly stated that Appendix C had a "specific template" that would "allow us to calculate the NER."<sup>7</sup> The Commission presumably defined the categories of calls in Appendix C based on release cause codes with this objective in mind. Notably, the Commission would *not* be able to calculate NER if the definitions in the template were subsequently revised such that calls that receive release cause codes 16 or 31, but were not answered, were not included.

While the Commission expressed concern in the *Order* with respect to incorrect or falsified cause codes that may mask looping or intentional blocking, Verizon has seen no evidence of this conduct from its intermediate providers. In any event, this conduct would

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<sup>6</sup> As Verizon previously explained, data available only to the RLECs are necessary to fully understand what is occurring in an OCN. *See* Reply Comments of Verizon and Verizon Wireless, WC Docket No. 13-39, at 6-7 (Feb. 18, 2014). RLECs' timely provision of such data would result in more effective and efficient analyses.

<sup>7</sup> *Order* ¶ 71.

not impact calls delivered without the use of an unaffiliated intermediate provider, which comprise the vast majority of Verizon's rural calls.

**II. Covered Providers Require Sufficient Time To Adjust to Any Commission Modifications of the Reporting Requirements.**

Since the *Order's* release in November 2013, Verizon has been working on implementation based on the criteria set forth in Appendix C of the *Order*. Consistent with Appendix C, Verizon has been planning to populate the "Answered" column in the reporting template with call attempts that received release cause code 16 or 31. If, despite the foregoing, the Commission were to modify what constitutes an answered call or require the reporting of additional data, that would force Verizon to make significant revisions to its implementation plan, requiring an additional period for implementation.

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