

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

In the Matter of )
Establishing the Digital Opportunity Data ) WC Docket No. 19-195
Collection )
Competitive Carriers Association and USTelecom )
- The Broadband Association Petition for )
Extension of Waiver Regarding the Requirement )
for a Certified Professional Engineer to Certify )
Broadband Data Collection Maps )

ORDER

Adopted: November 30, 2023

Released: November 30, 2023

By the Chiefs, Wireless Telecommunications Bureau, Wireline Competition Bureau, and Office of Economics and Analytics:

I. INTRODUCTION

1. In this Order, the Broadband Data Task Force, the Wireless Telecommunications Bureau, the Wireline Competition Bureau, and the Office of Economics and Analytics (Bureaus) respond to a Petition for Extension of Waiver filed by the Competitive Carriers Association (CCA) and USTelecom - The Broadband Association (USTelecom) (collectively Petitioners).1 The Petitioners request that the Commission renew for an additional three filing periods the 2022 Waiver that temporarily waived the Commission's requirement that the accuracy of a provider's biannual Broadband Data Collection (BDC) filings be certified by a Professional Engineer (PE), subject to the condition that such filings be certified by an otherwise-qualified engineer who does not have the PE credential.2 In this Order, we grant the Petition to extend the limited waiver of the Commission's rule for three filing periods (data as of December 31, 2023, June 30, 2024, and December 31, 2024), subject to certain conditions. As set forth in greater detail below, any provider availing itself of this waiver must: (1) have its BDC submission certified by an engineering professional with the qualifications specified in the 2022 Waiver; (2) preserve, for the applicable "as-of" filing date(s), certain categories of underlying network information for each submission filed under the waiver; and (3) upon request, expeditiously provide this network information to the Commission.

1 Petition for Extension of Waiver of Competitive Carriers Association and USTelecom - The Broadband Association, WC Docket No. 19-195 (filed Aug. 4, 2023), https://www.fcc.gov/ecfs/search/search-filings/filing/10804811316251 (Petition).

2 Petition at 7-8. The Petitioners ask that the 2022 Waiver be renewed or extended for an additional three filing periods (i.e., data as of December 31, 2023, June 30, 2024, and December 31, 2024). Id. See also Establishing the Digital Opportunity Data Collection; Competitive Carriers Association Petition for Declaratory Ruling or Limited Waiver Regarding the Requirement for a Certified Professional Engineer to Certify Broadband Data Collection Maps, WC Docket No. 19-195, Declaratory Ruling and Limited Waiver, 37 FCC Rcd 7836, 7842-47, paras. 12-20 (WCB/OEA/WTB 2022) (2022 Waiver).

## II. BACKGROUND

2. In March 2020, Congress passed the Broadband DATA Act requiring the Commission to adopt new rules for “the biannual collection and dissemination of granular data . . . relating to the availability and quality of service with respect to terrestrial fixed, fixed wireless, satellite, and mobile broadband internet access service.”<sup>3</sup> In the July 2020 *Second Order and Third Further Notice*,<sup>4</sup> the Commission established the requirements for the biannual submission of fixed broadband Internet access service availability and quality of service data and the submission of mobile broadband Internet access service data.<sup>5</sup> As required by the Broadband DATA Act, the Commission required providers to submit a certification from a corporate officer that the statements of fact contained in their biannual BDC submissions are true and correct.<sup>6</sup> The Commission also proposed to require a certified PE or corporate engineering officer to certify the accuracy of mobile service provider submissions and to require public filing of those certifications.<sup>7</sup> Similarly, the Commission sought comment on whether to require an engineering certification for biannual filings for fixed broadband service providers and on whether to establish penalties for violating the certification requirement.<sup>8</sup> Some commenters expressed support for these proposals, while others argued that requiring providers to submit an engineering certification would be overly burdensome.<sup>9</sup>

3. In January 2021, the Commission released the *Third Report and Order*, providing that, in addition to the corporate officer certification required by the *Second Order and Third Further Notice*, each mobile and fixed service provider also must submit a certification of the accuracy of its broadband submissions by a qualified engineer.<sup>10</sup> The Commission noted that while such a certification is in addition to the corporate officer certification required by the *Second Order and Third Further Notice*, a provider may submit a single certification that fulfills both requirements if the certifying corporate officer is also an engineer and has the requisite knowledge required under the Broadband DATA Act.<sup>11</sup> The Commission indicated that an engineering certification “must state that the certified professional engineer or corporate engineering officer is employed by the service provider and has direct knowledge of, or responsibility for, the generation of the service provider’s [Broadband Data Collection] coverage maps.”<sup>12</sup> The Commission determined that it was important to have a qualified engineer review and certify to the accuracy of a provider’s BDC submission and that such a requirement is consistent with Congress’s

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<sup>3</sup> Broadband Deployment Accuracy and Technological Availability Act, Pub. L. No. 116-130, 134 Stat. 228 (2020) (codified at 47 U.S.C. §§ 641-646) (Broadband DATA Act or Act); 47 U.S.C. § 642(a)(1)(A).

<sup>4</sup> *Establishing the Digital Opportunity Data Collection; Modernizing the FCC Form 477 Data Program*, WC Docket Nos. 19-195, 11-10, Second Report and Order and Third Further Notice of Proposed Rulemaking, 35 FCC Rcd 7460 (2020) (*Second Order and Third Further Notice*). The BDC was formerly known as the Digital Opportunity Data Collection, or DODC.

<sup>5</sup> *Second Order and Third Further Notice*, 35 FCC Rcd at 7462, para. 3.

<sup>6</sup> *Second Order and Third Further Notice*, 35 FCC Rcd at 7486, para. 61 (citing 47 U.S.C. § 642(b)(4)).

<sup>7</sup> *Id.* at 7506, para. 111.

<sup>8</sup> *Id.* at 7506, para. 112.

<sup>9</sup> Compare AT&T Sept. 8, 2020 Comments at 10-11, and WTA Sept. 8, 2020 Comments at 5-6, with ACA Connects Sept. 17, 2020 Reply at 9, NTCA Sept. 8, 2020 Comments at 14; Verizon Sept. 8, 2020 Comments at 15, and USTelecom/WISPA Sept. 8, 2020 Comments at 8.

<sup>10</sup> *Establishing the Digital Opportunity Data Collection; Modernizing the FCC Form 477 Data Program*, WC Docket Nos. 19-195, 11-10, Third Report and Order, 36 FCC Rcd 1126, 1144-45, paras. 42-45 (2021) (*Third Report and Order*).

<sup>11</sup> *Third Report and Order*, 36 FCC Rcd at 1144, para. 43.

<sup>12</sup> *Id.* at 1144-45, para. 43. In March 2022, the Bureau and Offices released an Order which provided further details regarding mobile components of the BDC. See *Establishing the Digital Opportunity Data Collection*, Order, 37 FCC Rcd 3007 (WTB/OEA/OET 2022) (*Mobile Technical Requirements Order*).

objective of assuring that it collects accurate data.<sup>13</sup> The Commission required that “[t]he certified professional engineer or corporate engineering officer shall certify that he or she has examined the information contained in the submission and that, to the best of the engineer’s knowledge, information, and belief, all statements of fact contained in the submission are true and correct, and in accordance with the service provider’s ordinary course of network design and engineering.”<sup>14</sup>

4. On May 13, 2022, CCA filed a petition asking the Commission to grant a limited waiver of the requirement for broadband data to be certified by a certified PE and “instead allow wireless carriers that do not have access to a licensed PE to certify data with an [Radio Frequency (RF)] engineering professional with specified qualifications.”<sup>15</sup> CCA asserted that the “experience and expertise developed by [RF] engineers through their work provides comprehensive skills relevant to broadband deployment [and] . . . provides skills comparable to, and perhaps more relevant than, general licensure through the PE . . . exam process.”<sup>16</sup> The Bureaus released a Public Notice on May 17, 2022, seeking comment on CCA’s 2022 Petition.<sup>17</sup>

5. On July 8, 2022, in response to the 2022 Petition, we issued the *2022 Waiver*, which waived the requirement that BDC certification be completed by a certified PE for three BDC filing periods (i.e., data collected as of June 30, 2022, December 31, 2022, and June 30, 2023), and the limited waiver instead allowed broadband providers to satisfy the engineering certification requirement using an RF engineering professional meeting certain specified qualifications.<sup>18</sup> Absent this *Order*, the waiver would not apply to data submitted as of December 31, 2023, and subsequent filing periods.<sup>19</sup>

6. On August 4, 2023, CCA and USTelecom filed the pending Petition requesting that the Commission renew the *2022 Waiver* for an additional three filing periods.<sup>20</sup> The Petitioners claimed “there have not been any significant workforce changes . . . since CCA filed its original [2022 Petition] that eliminate the need for relief” and that providers continue to “face significant challenges in meeting the requirement to use a licensed PE to certify broadband deployment data.”<sup>21</sup> CCA and USTelecom assert the BDC filing periods under which the PE waiver applied have been effective and have not impacted the quality or accuracy of filings.<sup>22</sup> Additionally, the Petitioners reiterate that certain qualified engineers other than PEs are equally—or perhaps better—qualified to certify the data in furtherance of the Commission’s goal to publish the most accurate maps possible and that these engineers should be allowed

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<sup>13</sup> *Third Report and Order*, 36 FCC Rcd at 1145, para. 45.

<sup>14</sup> *Id.* at 1145, para. 43. A certified PE, or a PE, is “an engineer possessing a professional license by virtue of completing multiple educational and testing requirements so as to earn a license from a state licensure board.” *2022 Waiver*, 37 FCC Rcd at 7838, para. 4.

<sup>15</sup> Petition of Competitive Carriers Association (CCA) for Declaratory Ruling or Limited Waiver, WC Docket No. 19-195, at 9 (filed May 13, 2022) (2022 Petition), <https://www.fcc.gov/ecfs/search/search-filings/filing/1051393345823>.

<sup>16</sup> *2022 Waiver*, 37 FCC Rcd at 7838, para. 5 (citing 2022 Petition at 6-7).

<sup>17</sup> See *Broadband Data Task Force, Wireless Telecommunications Bureau, Wireline Competition Bureau, and Office of Economics and Analytics Seek Comment on Competitive Carriers Association Petition for Declaratory Ruling or Limited Waiver Regarding the Requirement for a Certified Professional Engineer to Certify Broadband Data Collection Maps*, WC Docket No. 19-195, Public Notice, 37 FCC Rcd 6219 (WTB/OEA/OET 2022).

<sup>18</sup> *2022 Waiver*, 37 FCC Rcd at 7842-47, paras. 12-20. The *2022 Waiver* also applied to government entities and third parties to the extent they choose to file verified broadband availability data. *Id.* at 7842, para. 13 n.45. No parties have chosen to submit such data to date.

<sup>19</sup> *Id.* at 7842, para. 13.

<sup>20</sup> Petition at 2, 7.

<sup>21</sup> *Id.* at 4.

<sup>22</sup> *Id.* at 2.

to certify BDC filings rather than requiring a PE.<sup>23</sup> On August 11, 2023, the Bureaus released the *Petition Public Notice* seeking comment on the Petition.<sup>24</sup>

### III. DISCUSSION

7. We grant the Petition to extend the *2022 Waiver* for an additional three filing periods for fixed wireline, terrestrial fixed wireless, satellite, and mobile providers, subject to the condition that any filer electing to use this waiver must certify the filing in accordance with the requirements set forth in the *2022 Waiver*<sup>25</sup> and, in addition, preserve (for the applicable BDC “as-of” filing date) additional network information for expeditious submission to the Commission upon request.<sup>26</sup> The additional information required depends on the type of service the filer provides. The Broadband Data Task Force is releasing, contemporaneous with this *Order*, new data specifications that detail the supporting data that fixed wireline and terrestrial fixed wireless service providers availing themselves of the waiver will need to provide expeditiously to Commission staff upon request.<sup>27</sup> Details about the information satellite providers will need to preserve will be added to the newly released BDC Infrastructure Data Specifications prior to the opening of the December 2023 filing window. All filers electing to use this waiver must maintain, and provide on request, the specified data for the relevant service type.

8. We find that a conditional waiver for an additional three filing periods strikes an appropriate balance by giving providers limited relief from the PE requirement, on the condition that they are able to expeditiously provide to the Commission, when requested, underlying network information that supports their availability data. If a provider chooses not to certify its BDC filings pursuant to the Commission’s engineering certification rules (i.e., certification by a PE or by corporate engineering officer possessing at least a B.S. in engineering who has direct knowledge of, or responsibility for, the carrier’s network design and construction), and instead chooses to take advantage of the waiver, we believe it is necessary for the Commission to have available to it the additional network information upon staff request so that the Commission can, where warranted, readily investigate a filer’s availability data. Accordingly, to ensure that providers availing themselves of the waiver retain the appropriate documentation underlying their BDC filings for production to the Commission upon request, this *Order* specifies the types of documentation these providers must retain for each service type. By conditioning the waiver on having ready access to providers’ supporting data, the Commission will be able to assess the accuracy of the data where circumstances warrant substantiation. The infrastructure and other

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<sup>23</sup> *Id.* at 5–7.

<sup>24</sup> *Comments Sought on Petition for Extension of Waiver of the Requirement for a Certified Professional Engineer to Certify Broadband Data Collection Availability Data*, WC Docket No. 19-195, Public Notice, DA 23-688 (WTB/WCB/OEA Aug. 11, 2023) (*Petition Public Notice*), 88 Fed. Reg. 57030 (Aug. 22, 2023).

<sup>25</sup> *2022 Waiver*, 37 FCC Rcd at 7842-47, paras. 12-20. Engineers certifying BDC submissions using the *2022 Waiver* must possess either: (i) a bachelor’s or postgraduate degree in electrical engineering, electronic technology, or another similar technical discipline, and at least seven years of relevant experience in broadband network design and/or performance; or (ii) specialized training relevant to broadband network engineering and design, deployment, and/or performance, and at least ten years of relevant experience in broadband network engineering, design, and/or performance. *Id.* at 7846-47, para. 19.

<sup>26</sup> The *2022 Waiver* is conditionally extended as discussed herein for the additional three filing periods for data as of December 31, 2023, June 30, 2024, and December 31, 2024.

<sup>27</sup> See Broadband Data Collection, Data Specifications for Provider Infrastructure Data in the Challenge, Verification, and Audit Processes, November 30, 2023, <https://us-fcc.app.box.com/v/bdc-infrastructure-spec> (last visited Nov. 30, 2023) (BDC Infrastructure Data Specifications). The BDC Infrastructure Data Specifications also contain clarifications of the supporting data specifications for mobile service providers that were previously published. See *infra* para. 17.

network data submitted by providers in response to staff requests pursuant to this waiver process will be deemed to be presumptively confidential.<sup>28</sup>

9. Section 1.3 of the Commission's rules provides that the Commission may "on its own motion or on petition" waive a rule "for good cause shown, in whole or in part, at any time."<sup>29</sup> The Commission may find that the "good cause shown" standard is met when (1) "special circumstances warrant a deviation from the general rule"; and (2) "such deviation will serve the public interest."<sup>30</sup> A rule waiver may serve the public interest when the relief would not undermine the policy objectives of the rule.<sup>31</sup> In this case, granting a limited waiver extension, with conditions, of section 1.7004(d) of the Commission's rule requiring broadband availability data to be certified by a certified PE meets both of these tests.<sup>32</sup> We therefore conditionally waive this requirement for providers for purposes of certifying to the broadband availability data to be collected during an additional three filing periods of the BDC (i.e., data as of December 31, 2023, June 30, 2024, and December 31, 2024), provided that the filer electing the waiver: (1) meets the certification requirement set forth in the *2022 Waiver* by certifying data with an engineering professional with specified qualifications;<sup>33</sup> (2) preserve, for the applicable "as-of" filing date(s), certain categories of underlying network information; and (3) upon request, expeditiously provide this network information to the Commission. We find that extending the limited waiver with additional conditions gives providers that may be burdened by the PE requirement relief from that requirement, while also ensuring that the Commission has access to the data underlying the providers' BDC filings upon request.

10. Based on commenters' claims, we find that the ongoing lack of certified PEs who specialize in RF engineering and broadband network design constitutes "special circumstances" that warrant a deviation from the general rule that certified professional engineers must certify the accuracy of providers' biannual BDC broadband data submissions.<sup>34</sup> We also find that the waiver extension will serve the public interest. The continuing lack of PEs to certify BDC filings threatens to undermine the goal of collecting and developing accurate broadband availability data.<sup>35</sup> We find that extending the waiver continues to promote our goal of collecting data to publish an accurate national broadband map, while

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<sup>28</sup> The Commission has recognized that the collection of mobile network infrastructure information could raise commercial sensitivity and national security concerns and, in the *Third Report and Order*, determined that it would treat as presumptively confidential all mobile infrastructure information submitted by providers at the request of the Commission staff. See *Third Report and Order*, 36 FCC Rcd at 1148-49, para. 55. The Commission made a similar determination in the *Second Order and Third Further Notice* with regard to infrastructure data fixed wireless broadband service providers disclose in support of their availability filings. *Second Order and Third Further Notice*, 35 FCC Rcd at 7473-74, para. 31 (discussing categories of fixed wireless propagation modeling information the Commission will treat as presumptively public versus presumptively non-public). For these same reasons, the infrastructure and other network data submitted by fixed wireline providers in response to staff requests pursuant to this waiver process will also be deemed to be presumptively confidential.

<sup>29</sup> 47 CFR § 1.3. The Bureaus and Office issue this *Order* pursuant to their delegated authority. 47 CFR §§ 0.271, 0.291, 0.331.

<sup>30</sup> *Ne. Cellular Tel. Co. v. FCC*, 897 F.2d 1164, 1166 (D.C. Cir. 1990); see *WAIT Radio v. FCC*, 418 F.2d 1153, 1157-59 (D.C. Cir. 1969) (*WAIT Radio*).

<sup>31</sup> See *WAIT Radio*, 418 F.2d at 1155, 1157.

<sup>32</sup> See 47 CFR § 1.7004(d).

<sup>33</sup> See *supra* n.25.

<sup>34</sup> See Petition at 4 (stating, "[m]any broadband providers, including smaller CCA and USTelecom members, continue to face significant challenges in meeting the requirement to use a licensed PE to certify broadband deployment data. Such challenges include lack of existing inhouse experts or outside consultant resources with PE licensure in the states where the operators provide service and issues with the general availability of licensed PE resources in a cost-effective and timely manner given market demand for other infrastructure projects.").

<sup>35</sup> See generally 47 U.S.C. § 642.

also taking into account the burden that the PE certification places on certain providers. While we extend the waiver of the PE requirement, we conclude that it is appropriate to impose conditions on this waiver to ensure Commission staff can obtain supporting network information to enable further and expeditious investigation into a provider's claims of coverage.<sup>36</sup>

11. In the Petition, CCA and USTelecom claim that there is an ongoing need for the *2022 Waiver* and that many providers continue to face significant challenges in meeting the requirement to certify using a PE.<sup>37</sup> Numerous commenters echo their assertions that nothing has changed in the industry since the initial waiver and that there is a continued scarcity of certified PEs.<sup>38</sup> WISPA notes that “[t]here continues to be a lack of certified professional engineers specializing in RF engineering and broadband network design” and asserts that this continuing shortage could post a risk of delays in reporting BDC data on a timely basis.<sup>39</sup> JackRabbit Wireless states that “[f]or the last year, we have been searching for a PE with any relevant RF experience who could certify our BDC data for the eventual expiration of the waiver, but have been unsuccessful.”<sup>40</sup> CTIA maintains that “PE licensure is uncommon among the RF engineering workforce, and the lack of licensed PEs with expertise in RF engineering and broadband network design makes it impractical for providers to retain licensed PEs to perform RF engineering work and to rely on certifications by licensed PEs.”<sup>41</sup> Rural Electric Cooperatives Providing Broadband similarly states that “the requirements necessary to become a licensed PE are exhaustive; however, most broadband professionals have degrees in computer science, communications, IT, or electronics, which do not align with the accredited PE path.”<sup>42</sup> USTelecom proposes additional information that BDC filers could provide that would better ensure map accuracy than a PE certification.<sup>43</sup>

12. Although numerous commenters assert that there is a PE shortage, a few assert the opposite. RWA claims that the *2022 Waiver* has allowed filers an extra 18 months to plan and retain PEs for their BDC filings and has provided enough time for engineers to become certified PEs.<sup>44</sup> Vantage Point Solutions calls the shortage claim “unsubstantiated.”<sup>45</sup> NTCA also notes that the Petition “contains no specific evidence as to the inability to procure assistance from professional engineers.”<sup>46</sup> In any case,

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<sup>36</sup> See *2022 Waiver*, 37 FCC Rcd at 7843, para. 14.

<sup>37</sup> Petition at 4-5.

<sup>38</sup> See, e.g., JackRabbit Wireless, LLC Comments at 1; NCTA Comments at 2-3; BDC Carrier Coalition Comments at 5; Rural Electric Cooperatives Comments at 4-5; WISPA Comments at 5-6; CTIA Comments at 4-5; Lee Wireless, LLC Comments; ACA Connects Comments at 3; CTIA Reply at 2, 6.

<sup>39</sup> WISPA Comments at 4 and 6-7. WISPA references a recent survey it conducted where “only two percent of respondents indicated that they employed a state-licensed engineer and about 14 percent reported that they employed a corporate engineering officer meeting the Commission’s requirements” and “more than half of the respondents took advantage of the waiver.” WISPA Comments at 5-6.

<sup>40</sup> JackRabbit Wireless, LLC Comments at 1.

<sup>41</sup> CTIA Comments at 4.

<sup>42</sup> Rural Electric Cooperatives Comments at 4-5.

<sup>43</sup> Letter from B. Lynn Follansbee, USTelecom, to Marlene H. Dortch, Secretary, FCC, WC Docket No. 19-195, (filed Oct. 13, 2023) (USTelecom Oct. 13, 2023 *Ex Parte*). For fixed wireless filers using shapefiles, the sorts of methodology narratives used to develop their broadband coverage could be maintained to be reviewed by the Commission should there be questions about their ability to service a specific location. *Id.* Fixed wireless filers submitting polygon coverage could be required to retain detailed backup data such as link budgets used to generate the polygon. *Id.*

<sup>44</sup> RWA Comments at 5-6.

<sup>45</sup> Vantage Point Solutions Reply at 7.

<sup>46</sup> NTCA Comments at 3.

the record does not contain any evidence that the number of PEs increased since the initial waivers or that broadband engineers undertook the additional PE licensing requirement.

13. As with the *2022 Waiver*, this waiver extension is also consistent with the policy objectives of the PE certification rule because providers will still be required, under the terms of the limited waiver we adopt, to have an engineer meeting the qualifications outlined in the *2022 Waiver* review and certify the provider's BDC submissions to help ensure the accuracy of the broadband data the provider submits.<sup>47</sup> The requirement that PEs certify the accuracy of providers' BDC submissions was adopted to ensure that filers have engaged in the analysis necessary to meet Congress's objective of developing more accurate broadband coverage data.<sup>48</sup> The Commission's rules already allow providers to submit their biannual BDC filings based on the engineering certification from a corporate engineering officer meeting the criteria outlined in section 1.7004(d), who is not required to be a PE.<sup>49</sup> Engineers certifying BDC submissions using the *2022 Waiver* must possess "either: (i) a bachelor's or postgraduate degree in electrical engineering, electronic technology, or another similar technical discipline, and at least seven years of relevant experience in broadband network design and/or performance; or (ii) specialized training relevant to broadband network engineering and design, deployment, and/or performance, and at least ten years of relevant experience in broadband network engineering, design, and/or performance."<sup>50</sup> As the record notes and as discussed above, many of the RF engineers that providers employ do not hold PE licenses but do have the specialized RF engineering expertise that qualifies them to certify the accuracy of providers' broadband data submissions, per the *2022 Waiver*.<sup>51</sup> The certifying engineer is still responsible for ensuring the accuracy of BDC filings and the Commission has the authority to apply sanctions where appropriate; moreover, it is unlawful for an entity or individual to willfully and knowingly, or recklessly, submit materially inaccurate or incomplete information about the availability or the quality of broadband internet access service.<sup>52</sup> Thus, even when the certifier is not a PE, the certification requirements set forth in the *2022 Waiver* provide sufficient assurances of the accuracy of provider BDC submissions and providers are accountable for and face appropriate consequences in the event of an erroneous filing. The document retention and production conditions we apply to BDC submissions under the waiver provide an additional safeguard by ensuring the Commission has access to network information underlying a BDC submission made under the waiver in the event further review is warranted.

14. Moreover, the PE certification requirement does not exist in a vacuum, and other processes inherent in the BDC improve the accuracy of the broadband availability data shown on the National Broadband Map. As the record notes, the availability challenge process is one such process.<sup>53</sup>

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<sup>47</sup> *2022 Waiver*, 37 FCC Rcd at 7844, para. 16 (noting "[t]he limited waiver we adopt only modifies the engineering certification requirement to allow providers to use otherwise-qualified engineers who are not certified PEs to make the required certifications.").

<sup>48</sup> *Third Report and Order*, 36 FCC Rcd at 1145, para. 45.

<sup>49</sup> *2022 Waiver*, 37 FCC Rcd at 7838, para. 6 ("[U]nder the Commission's rules, where a mobile or fixed service provider submits a certification of the accuracy of its broadband submissions from a 'corporate engineering officer,' the corporate engineering officer does not need to be a certified PE.").

<sup>50</sup> *2022 Waiver*, 37 FCC Rcd at 7846-47, para. 19.

<sup>51</sup> See, e.g., NCTA Comments at 2 (noting, "[t]he engineers developing the BDC submissions for the various providers are highly trained, qualified and competent, but typically do not hold a PE license."); CTIA Comments at 4 (noting "[t]rained and experienced RF engineers are fully qualified to evaluate the accuracy of a provider's broadband maps and to certify their accuracy, regardless of whether those RF engineers are also licensed PEs").

<sup>52</sup> 47 U.S.C. § 643; 47 CFR § 1.7009(a); *Second Order and Third Further Notice*, 35 FCC Rcd at 7493, para. 77; *Third Report and Order*, 36 FCC Rcd 1126, 1178-84, paras. 133-47.

<sup>53</sup> See, e.g., Rural Electric Cooperatives Providing Broadband Comments at 6 (noting that entered BDC data "allows anyone . . . to challenge the service provider's broadband availability reporting"); NRECA Reply at 7 (noting that  
(continued....)

In addition, where a basis for an availability data inquiry exists, the Commission employs various tools to verify such data.<sup>54</sup> Audits are another process the Commission uses to verify the accuracy of provider reported coverage data.<sup>55</sup> These challenge, verification, and audit processes all aim to improve map accuracy and are ongoing.<sup>56</sup> These processes provide a suite of complementary tools used in conjunction with one another (among other things) to ensure the greatest degree of map accuracy possible. We find these tools, together with the additional information that providers that avail themselves of the waiver must preserve and make available upon request are sufficient to allow staff to perform technical reviews to ensure map accuracy and mitigate the concerns raised by a few commenters opposed to the waiver extension.<sup>57</sup> The requirement calls for production of the types of supporting data that providers in each of the covered categories must use to compile their biannual BDC submissions and to assure that their submission is accurate and complete. They are also the types of data necessary for the Commission to verify the provider's BDC submission.

15. A few commenters assert that a PE certification is an important check on potentially inaccurate BDC filings and that waiving it removes professional engineering standards from filings<sup>58</sup> and criticize the Petition for “dismissing the value of expert engineering certification” and ignoring meaningful review.<sup>59</sup> These commenters also assert that waiving the PE requirement (and its extension) removes or reduces accountability or the threat of sanction or adverse consequences for erroneous filings, and suggest that the professional liability exposure of the PE is more pertinent than “the capabilities of the engineer.”<sup>60</sup> We are not persuaded by these commenters' arguments. As explained above, the requirement that PEs certify the accuracy of providers' BDC submissions was adopted as one of several measures for ensuring that filers have engaged in the analysis necessary to meet Congress's objective of developing more accurate broadband coverage data.<sup>61</sup> However, as discussed above, the PE certification is not the only safeguard against inaccurate BDC filings or for holding providers accountable for erroneous filings.

16. Finally, we find that extending the limited waiver for three filing periods will serve the public interest because it will help ensure timely submissions of BDC filings by eliminating the potential delays that could be associated with providers' attempting to hire or retain certified PEs to review their broadband data. Timely submission of broadband data is particularly important because the data serves as

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“BDC data can be challenged.”); USTelecom and CCA Reply at 4 (stating that “[w]hat ensures accuracy and accountability are the multiple verification and validation processes inherent in the system”); *see* 47 U.S.C. § 642(b)(5).

<sup>54</sup> *Third Report and Order*, 36 FCC Rcd at 1146, para. 47; *see* 47 U.S.C. § 642(b)(4)(B).

<sup>55</sup> 47 U.S.C. § 644(a); *see Second Order and Third Further Notice*, 35 FCC Rcd at 7485-86, paras. 58-60.

<sup>56</sup> 47 U.S.C. § 642(b)(4)(B); *Third Report and Order*, 36 FCC Rcd 1126, 1145-54, paras. 47-69; 47 CFR § 1.7006(a); *Second Order and Third Further Notice*, 35 FCC Rcd 7460, 7485-86, paras. 58-60.

<sup>57</sup> Filers should be advised that, as a condition of this waiver, Commission staff may request this additional information as warranted at the Commission staff's discretion; a request for these data may not necessarily be based upon criteria applicable to other processes, such as random selection or “patterns of filing incorrect information” in the case of audits. *See* 47 CFR § 1.7006(a). Moreover, the additional data discussed below apply to a provider's entire network. This does not necessarily mean staff will request data involving the provider's entire network, but these data must be available for any part of the network for which staff requests data.

<sup>58</sup> RWA Comments at 2-4.

<sup>59</sup> NTCA Comments at 4-5.

<sup>60</sup> RWA Comments at 3-4; *see also* Vantage Point Solutions Reply at 5 (stating that the rule requiring PE certification creates a significant level of accountability).

<sup>61</sup> *Third Report and Order*, 36 FCC Rcd at 1145, para. 45.



the basis for the distribution of many broadband deployment funds.<sup>62</sup> As noted above, the ongoing scarcity of PEs with expertise in communications network engineering threatens to frustrate the timeliness of BDC filings for certain providers which, in turn, threatens to undermine the timeliness and accuracy of coverage data. We find that granting a conditioned limited waiver of the requirement that providers use certified PEs will help ensure that providers submit their BDC filings on time because it will allow them to use their current broadband network design and RF engineering staff to review and certify their submissions. This, in turn, serves the public interest by ensuring that providers are not delayed in filing their BDC data due to the lack of a PE.

17. *Additional Network Information Required of Mobile Providers.* All mobile providers are required to submit certain supporting data as part of their biannual BDC submissions.<sup>63</sup> In addition to this information, mobile providers that avail themselves of this *Order* must also retain and be prepared to submit to the Commission (upon request) the mobile infrastructure data enumerated in Sections 1.1, 1.2, and 1.3 of the Data Specifications for Provider Infrastructure Data in the Challenge, Verification, and Audit Processes.<sup>64</sup> These data pertain to the availability data submitted in the BDC and include base station attributes such as location and height above-mean-sea-level, sector azimuths, base station carriers, and base station loading so that staff can methodically verify the provider's claimed coverage.<sup>65</sup> Mobile providers will submit these data through the BDC system as instructed by the staff. In response to a Commission request, mobile providers who submit biannual BDC data pursuant to this waiver extension must provide such data with respect to the service area(s) specified in the request.

18. *Additional Network Information Required of Terrestrial Fixed Wireless Providers.* Terrestrial fixed wireless providers are required to submit certain supporting data as part of their biannual BDC submissions.<sup>66</sup> In addition to the information submitted as part of their BDC filing, terrestrial fixed wireless providers availing themselves of the waiver extension must retain and submit to the Commission (upon request) propagation modeling and fixed wireless infrastructure data, including link budget information, outlined in Section 2.2 of the Data Specifications for Provider Infrastructure Data in the

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<sup>62</sup> See, e.g., NTIA, Notice of Funding Opportunity, Broadband Equity, Access, and Deployment Program at 31, 34 <https://broadbandusa.ntia.doc.gov/sites/default/files/2022-05/BEAD%20NOFO.pdf> (last visited Nov. 30, 2023) (directing that an "Eligible Entity" for funding must "[i]dentify [in its Initial Proposal] each unserved location and underserved location ... using the most recently published Broadband DATA Maps ... and identify the date of publication of the Broadband DATA Maps used..." as well as update its proposal at the time it initiates a challenge process "to reflect the most recently published version of the Broadband DATA Maps available ...").

<sup>63</sup> For example, in addition to information describing the methodology used to develop the availability coverage data, mobile providers must submit propagation model details and link budget information including propagation modeling information, mobile link budget parameters, clutter category data, link budget parameters rationale, and others. See Broadband Data Collection, Data Specifications for Biannual Submission of Subscription, Availability, and Supporting Data, March 30, 2023, Section 9, at 54-72, <https://us-fcc.box.com/v/bdc-availability-spec> (last visited Nov. 30, 2023) (BDC Biannual Submission Data Specifications).

<sup>64</sup> BDC Infrastructure Data Specifications at 4-12; see *supra* n.27.

<sup>65</sup> *Id.* The loading data we ask for in Section 1.3 is the actual loading of the serving cell over a one-week period before and/or after the "as of" BDC filing date, in 15-minute intervals. See *Mobile Technical Requirements Order*, 37 FCC Rcd at 3051-52, para. 78.

<sup>66</sup> The additional information that will need to be provided in response to a request differs somewhat depending upon whether the provider submits coverage data in the form of polygon shapefiles or location lists. Terrestrial fixed wireless providers who submit their BDC availability data in the form of polygon shapefiles must already provide, for example, a unique combination of the following fields: providerid, brandname, technology, maxdown, maxup, low latency, bizrescode, model details, base station location and height, base station carriers, link budget parameters, clutter category. See BDC Biannual Submission Data Specifications, Sections 6.2, 7.3-7.7, at 27-31, 35-48. Terrestrial fixed wireless providers who submit their BDC data as location lists must already provide, for example, location ID, technology code, max advertised download and upload speed. See *id.*, Section 6.1, at 23-27.

Challenge, Verification, and Audit Processes.<sup>67</sup> These specifications are applicable both to terrestrial fixed wireless filers who submit location lists in their BDC filing and to filers who submit GIS data. Terrestrial fixed wireless providers who submit biannual BDC data pursuant to this waiver extension must provide such data with respect to the service area(s) specified in the request.

19. *Additional Network Information Required of Fixed Wireline Providers.* Fixed wireline providers intending to avail themselves of the *Order* must generate and retain, and submit to the Commission (upon request), infrastructure data on the locations of their network distribution hubs and splitters, outlined in Section 2.1 of the Data Specifications for Provider Infrastructure Data in the Challenge, Verification, and Audit Processes.<sup>68</sup> Fixed wireline filers who submit biannual BDC data pursuant to this waiver extension must provide such data with respect to the service area(s) specified in the request.

20. *Additional Network Information Required of Satellite Providers.* Satellite providers intending to avail themselves of this waiver extension will be required to generate and retain, and submit to the Commission (upon request), structured data reflecting the status of their system deployment as of the relevant filing period.<sup>69</sup> Additional details about the information satellite providers will need to preserve will be added to the newly released BDC Infrastructure Data Specifications prior to the opening of the December 2023 filing window. Satellite providers who submit biannual BDC data pursuant to this waiver extension must provide such data with respect to the service area(s) specified in the request.

21. To the extent that a provider wishes to avail itself of the waiver extension we issue today, it should indicate its request via the appropriate checkbox selection under the Certifying Engineer section of the Certification form for its submission in the BDC system.<sup>70</sup> Information about BDC certification requirements can be found in this help center article: <https://help.bdc.fcc.gov/hc/en-us/articles/7332045373595-BDC-Certification-Requirements->. The article has links to the newly released BDC Infrastructure Data Specifications that detail the types of information filers availing themselves of the waiver must retain.

22. Finally, we note that while the conditions established herein pertain to filers who elect to submit data certified pursuant to the waiver extension, they are in addition to the Commission's ongoing efforts to verify and audit data and to seek supporting infrastructure and/or on-the-ground test data from all filers as part of those efforts, which may include (but is not limited to) requests for the data specified herein. We therefore remind all filers that they should be retaining such data to support their submissions in each of our biannual data collections and additionally be prepared to produce it upon request as part of the Commission's efforts to validate availability data.<sup>71</sup>

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<sup>67</sup> See BDC Infrastructure Data Specifications, Section 2.2, at 39-54; *see supra* n.27.

<sup>68</sup> *Id.*, Section 2.1, at 36-38; *see supra* n.27. We note that the infrastructure data outlined in Section 2.1 is applicable to the creation of polygon shapefiles; however, we would expect that filers of fixed wireline availability data using location lists would have either used similar information to identify BSLs where they can make service available or have "network diagrams or comparable items depicting the location of their network equipment" to share with the FCC. *See* USTelecom Oct. 13 *Ex Parte* at 1. Accordingly, we will require location list filers to provide similar data and documentation upon request.

<sup>69</sup> The categories of data satellite providers will be required to maintain will be based upon information collected from satellite operators under the Commission's Part 25 rules, but we emphasize that the data must reflect actual deployments as of the relevant filing period (as opposed to authorized service parameters).

<sup>70</sup> See Federal Communications Commission, Federal Communications Commission Broadband Data Collection BDC System User Guide 142 (2023), <https://us-fcc.app.box.com/v/bdc-filer-user-guide>.

<sup>71</sup> See, e.g., *Second Order and Third Further Notice*, 35 FCC Rcd at 7485-86, paras. 58-60 (discussing the Commission's mandate to conduct audits and the tools available to the Commission); *see also Third Report and Order*, 36 FCC Rcd at 1145-51, paras. 47-60 (discussing the Commission's mandate to verify provider data).

**IV. ORDERING CLAUSES**

23. Accordingly, IT IS ORDERED that, pursuant to the authority contained in sections 1-4, of the Communications Act of 1934, as amended, 47 U.S.C. §§ 151-154, and section 1.3 of the Commission's rules, 47 CFR § 1.3, that section 1.7004(d), 47 CFR § 1.7004(d), is WAIVED to the extent indicated herein.

24. This action is taken by the Chiefs of the Wireless Telecommunications Bureau, Office and Economics and Analytics, and Wireline Competition Bureau under delegated authority, pursuant to sections 0.21, 0.91, 0.131, 0.271, 0.291, and 0.331 of the Commission's rules, 47 CFR §§ 0.21, 0.91, 0.131, 0.271, 0.291, 0.331.

FEDERAL COMMUNICATIONS COMMISSION

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