

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

In the Matter of)
Establishing the Digital Opportunity Data) WC Docket No. 19-195
Collection)
Modernizing the FCC Form 477 Data Program) WC Docket No. 11-10

ORDER

Adopted: June 25, 2021

Released: June 25, 2021

By the Acting Chief, Wireless Telecommunications Bureau:

I. INTRODUCTION

1. The Broadband Data Task Force and the Wireless Telecommunications Bureau grant a limited waiver of sections 1.7001(b)-(c) and 1.7002 of the Commission’s rules and the related Form 477 Instructions to AT&T Wireless, T-Mobile, U.S. Cellular, Verizon Wireless, and their subsidiaries (collectively, the Companies)¹ regarding the filing of certain Form 477 data.² Specifically, we waive the requirement that the Companies report their 4G LTE mobile deployment data as of June 30, 2021. In recognition of the public interest in improving the data collected by the Commission on broadband availability throughout the United States and in assisting the Commission’s effort to build a Broadband Data Collection (BDC) system to collect and make available more precise and reliable maps, the Companies have voluntarily committed to report their 4G LTE mobile deployment data as of May 15, 2021, using certain standardized parameters established as part of the Broadband Data Collection.³ The Companies also have voluntarily committed to upload this data into the Form 477 system as soon as practicable after the Form 477 filing window opens on July 1, 2021, and to certify the accuracy of the data.

2. We find that granting a waiver to the extent necessary to allow the Companies to report their 4G LTE mobile deployment data as of May 15, 2021, premised on their voluntary commitments, will benefit the public interest by accelerating the collection of more standardized mobile deployment data as the Commission transitions to the Broadband Data Collection and will provide the Commission with real-world data consistent with the BDC parameters that will assist it in the ongoing effort to build the BDC systems and platforms. The Companies shall file the remainder of their Form 477 data in a manner consistent with the Commission’s rules and Form 477 Instructions on or before the September 1, 2021 deadline for filing data as of June 30, 2021.

¹ The Companies filed their most recent publicly available Form 477 data under the following names: New Cingular Wireless Servs., Inc.; T-Mobile USA, Inc.; U.S. Cellular Corp.; and Cellco Partnership. These filings for their June 2020 477 data were done using the following Federal Registration Numbers, respectively: 0003766532; 0006945950; 0004372322; and 0018506568.

² 47 CFR §§ 1.7001(b)-(c), 1.7002; FCC Form 477, Local Telephone Competition and Broadband Reporting Instructions (Form 477 Instructions), https://us-fcc.app.box.com/v/Form477Instructions.

³ See 47 CFR § 1.7004(c)(3)(i)-(iv); 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, 7474, 7477-78, paras. 33, 39-41 (2020) (Second Order). The Broadband Data Collection was formerly known as the Digital Opportunity Data Collection.

II. BACKGROUND

3. The Commission uses Form 477 to collect data about broadband connections to end-user locations, wired and wireless local telephone services, and interconnected Voice over Internet Protocol (VoIP) services in the 50 states, the District of Columbia, and the major U.S. Territories and possessions.⁴ The Commission uses this information to assess the deployment of broadband service and competition in local telecommunications services.⁵ The data have allowed the Commission to make available a nationwide broadband deployment dataset, have significantly improved the Commission's understanding of the state of broadband deployment, and have helped to identify the unserved areas throughout the United States.

4. Section 1.7001(b) of the Commission's rules provides that facilities-based broadband service providers "shall file with the Commission a completed FCC Form 477, in accordance with the Commission's rules and the instructions to the FCC Form 477."⁶ Further, section 1.7002 provides that these broadband service providers "shall file reports semi-annually" with the next report due by September 1 to report data from January 1 through June 30.⁷ The current Form 477 Instructions, in turn, provide that facilities-based mobile broadband providers must report on mobile broadband deployment by submitting, for each available transmission technology, polygons in GIS mapping files that digitally represent the geographic areas in which users should expect to receive the minimum upload and download data speed the mobile provider advertises for that area or, if the provider does not advertise such speeds, the minimum upload and download data speeds users should expect to receive within the polygon.⁸ Mobile service providers must also submit polygons representing geographic coverage for their voice service by transmission technology.⁹

5. Congress, the Commission, and other stakeholders have acknowledged certain limitations of the current Form 477 data collection, which include the fact that the parameters pertaining to the collection of mobile broadband coverage data lack sufficient specificity and have led to the collection of inconsistent data across the various mobile carriers.¹⁰ The Broadband Deployment Accuracy and

⁴ See 47 U.S.C. § 153(58); see also 47 CFR § 1.7001(b) (listing entities that are required to file Form 477).

⁵ See *Establishing the Digital Opportunity Data Collection*, WC Docket No. 19-195, Report and Order and Second Further Notice of Proposed Rulemaking, 34 FCC Rcd 7505 (2019) (*2019 Order*); *Modernizing the FCC Form 477 Data Program*, WC Docket No. 11-10, Report and Order, 28 FCC Rcd 9887 (2013).

⁶ 47 CFR § 1.7001(b). Filers also "shall include in each report a certification signed by an appropriate official of the respondent (as specified in the instructions to FCC Form 477) and shall report the title of their certifying official." 47 CFR § 1.7001(c).

⁷ 47 CFR § 1.7002; see also Form 477 Instructions at 32 (stating that, by "September 1st of each year[,] providers must file data as of June 30 of the same year").

⁸ The Form 477 Instructions state that "[m]obile broadband providers shall submit polygons in a shapefile format representing geographic coverage nationwide . . . for each mobile broadband transmission technology The data associated with each polygon should indicate the minimum advertised upload and download data speeds associated with that network technology . . . and the coverage area polygon should depict the boundaries where, according to providers, users should expect to receive those advertised speeds. If a provider advertises different minimum upload and download speeds in different areas of the country using the same technology, then the provider should submit separate polygons showing the coverage area for each speed. A variation in technology or speed would require the submission of a separate polygon. If a provider does not advertise the minimum upload and/or download data speeds, the provider must indicate the minimum upload/download data speeds that users should expect to receive within the polygon depicting the geographic coverage area of the deployed technology." Form 477 Instructions at 25 (emphasis omitted).

⁹ Form 477 Instructions at 26.

¹⁰ See, e.g., H.R. Rep. No. 116-350, at 9-10 (2019); S. Rep. No. 116-74, at 2-3 (2019); *Second Order*, 35 FCC Rcd at 7462-64, paras. 4-8.

Technological Availability Act (the Broadband DATA Act) therefore requires the Commission to collect from each mobile broadband provider propagation maps and propagation model details that indicate a provider's current 4G LTE coverage based on certain minimum specified parameters.¹¹ In July 2020, the Commission adopted the *Second Order* to implement certain requirements of the Broadband DATA Act and to further specify the framework and elements of the Broadband Data Collection.¹² Among other things, the *Second Order* requires mobile providers to submit propagation maps and propagation model details for each mobile broadband technology (3G, 4G LTE, and 5G-NR) and for mobile voice service based on specified parameters.¹³ Specifically, for mobile broadband services, the *Second Order* requires mobile providers to submit, for each transmission technology, propagation maps reflecting minimum user download and upload speeds at prescribed minimum cell edge probabilities, cell loading factors, and modeling resolution.¹⁴ It also requires providers to disclose to the Commission details of their propagation models and the link budgets they use for modeling cell edge network throughput.¹⁵

III. DISCUSSION

6. Section 1.3 of the Commission's rules provides that the Commission may "on its own motion" waive a rule "for good cause shown, in whole or in part, at any time."¹⁶ In order to meet the "good cause shown" standard, the Commission must find that: (1) "special circumstances warrant a deviation from the general rule"; and (2) "such deviation serves the public interest."¹⁷ A rule waiver may serve the public interest when the relief would not undermine the policy objectives of the rule.¹⁸ In this case, granting a limited waiver of sections 1.7001(b)-(c) and 1.7002 of the Commission's rules and the related Form 477 Instructions to the extent necessary to allow the Companies to voluntarily report their 4G LTE mobile deployment data as of May 15, 2021, rather than as of June 30, 2021,¹⁹ premised on the Companies' voluntary commitments, meets both prongs of this test.

¹¹ Broadband Deployment Accuracy and Technological Availability Act, Pub. L. No. 116-130, § 802(b)(2)(B), 134 Stat. 228, 232-33 (2020) (codified at 47 U.S.C. § 642(b)(2)(B)) (Broadband DATA Act). The Act requires the maps to: (1) "take into consideration the effect of clutter"; (2) reflect "a download speed of not less than 5 megabits per second and an upload speed of not less than 1 megabit per second with a cell edge probability of not less than 90%"; and "cell loading of not less than 50%"; and (3) reflect "any other parameter that the Commission determines to be necessary to create a map . . . that is more precise than the map produced" under the Mobility Fund Phase II data collection. *Id.*

¹² *Second Order*, 35 FCC Rcd at 7461-62, paras. 2-3.

¹³ The Commission found that requiring propagation maps based on standardized parameters for all broadband technologies and for mobile voice services would help it assess and compare coverage maps among providers. *Second Order*, 35 FCC Rcd at 7476-77, para. 38.

¹⁴ *See Second Order*, 35 FCC Rcd at 7474, 7476-81, paras. 32, 38-47; 47 CFR § 1.7004(c)(3)(i)-(iii).

¹⁵ *Second Order*, 35 FCC Rcd at 7481, para. 48.

¹⁶ 47 CFR § 1.3.

¹⁷ *See, e.g., 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*).

¹⁸ *See WAIT Radio*, 418 F.2d at 1155, 1157.

¹⁹ We waive the requirement in section 1.7002 and the Form 477 Instructions that providers report their 4G LTE mobile deployment data as of June 30, 2021. *See* 47 CFR § 1.7002; Form 477 Instructions at 32. In addition, we waive section 1.7001(c) and the Form 477 Instructions to the extent that they require the Companies to certify that the 4G LTE mobile deployment data is accurate as of June 30, 2021. *See* 47 CFR § 1.7001(c); Form 477 Instructions at 32. Finally, we grant a limited waiver of section 1.7001(b), which requires facilities-based broadband providers to file Form 477 "in accordance with the Commission's rules and the instructions to the FCC Form 477," to the extent that the rules and Instructions require the reporting of 4G LTE mobile deployment data as of June 30, 2021. The Companies do not require a waiver to report 4G LTE mobile deployment data using the parameters set

(continued...)

7. We find that the Companies' voluntary commitments constitute "special circumstances" that warrant a deviation from the general rule that providers report their 4G LTE mobile deployment data as of June 30, 2021. As noted above, the Companies have voluntarily committed to report their 4G LTE mobile deployment data as of May 15, 2021, using the standardized data parameters set forth in section 1.7004(c)(3)(i)-(iii), and to upload this data into the Form 477 system as soon as practicable after the Form 477 filing window opens on July 1, 2021. Specifically, the Companies will use propagation modeling to generate maps showing their 4G LTE mobile broadband and voice coverage for on-street or pedestrian stationary usage.²⁰ The mobile broadband coverage maps will reflect coverage areas where users should expect to receive the minimum required download and upload speeds with cell edge coverage probability of not less than 90% and a cell loading of not less than 50%.²¹ The Companies will generate coverage maps with a spatial resolution of 100 meters or better, and the maps should account for terrain and clutter and use terrain and clutter data with a resolution of 100 meters or better.²² The Companies will upload their coverage maps in vector format,²³ and the mobile broadband maps will reflect a minimum expected user download speed of 5 Mbps and user upload speed of 1 Mbps at the cell edge.²⁴

8. The limited waiver we grant to the Companies is in the public interest and is consistent with the policy objectives of sections 1.7001(b)-(c) and 1.7002 of the Commission's rules and the relevant Form 477 Instructions. The waiver will allow the Companies to submit more standardized 4G LTE mobile deployment data using the existing Form 477 filing platform while the Commission finalizes its work on the Broadband Data Collection systems and processes. This will provide more accurate and comprehensive data for a variety of purposes. For example, it will allow the Commission and the public to review mobile deployment data from the three nationwide providers and a large regional provider on a network-wide basis, which presently is not possible due to a lack of standardized parameters. The waiver will also help the Commission evaluate and if necessary fine-tune the coverage parameters. It will also assist the Commission in developing data file fields and format specifications in the new BDC platform and to test those systems with real-world data before the full implementation of the BDC. Moreover, the limited six-week waiver for 4G data does not compromise the Commission's ability to collect data on a semi-annual basis.²⁵ It is a minor deviation from the six-month collection period for the limited purpose of accelerating the Commission's collection of more standardized 4G LTE data as it moves forward with the transition to the new Congressionally mandated data collection requirements. Furthermore, continuing to require submissions of data as of June 30 in addition to collecting 4G data as of May 15 would be overly burdensome for the Companies and would likely be a substantial disincentive to voluntarily providing data early. Moreover, requiring a second submission of 4G data only six weeks more recent than May 15 data would not provide materially improved data, whereas collecting a

forth in section 1.7004(c)(3)-(iii) because doing so is consistent with the Commission's rules and related Form 477 instructions.

²⁰ *Second Order*, 35 FCC Rcd at 7474, para. 33.

²¹ See 47 CFR § 1.7004(c)(3)(ii); *Second Order*, 35 FCC Rcd at 7477, para. 39. 4G LTE mobile voice coverage maps should reflect coverage areas with cell edge coverage probability of not less than 90% and a cell loading of not less than 50%.

²² See 47 CFR § 1.7004(c)(3)(iii); *Second Order*, 35 FCC Rcd at 7477-78, paras. 40-41.

²³ See 47 CFR § 1.7004(c)(3)(iv); *Second Order*, 35 FCC Rcd at 7482, para. 50.

²⁴ See 47 CFR § 1.7004(c)(3)(i); *Second Order*, 35 FCC Rcd at 7479, para. 44.

²⁵ *Local Competition and Broadband Reporting*, Report and Order, CC Docket No. 99-301, 15 FCC Rcd 7717, 7746, para. 56 (2000) (requiring providers to report their data semi-annually to "best balance [its] need for timely information with [its] desire to minimize the reporting burden"); *id.* (noting that semi-annual reporting would provide "the most accurate, comprehensive, and timely picture" of the data and would "enable [it] to quickly compose a baseline assessment" of the market).

voluntary submission of 4G data as of May 15 furthers the goals of the Broadband DATA Act by allowing the Commission to collect real-world 4G data at the BDC data parameters as early as possible in the Form 477 filing window and therefore furthers the Commission's efforts to deploy the BDC systems and platforms as quickly as possible.

9. To fulfill the certification obligation for all data, the Companies will upload their 4G LTE broadband and voice map data in the Form 477 system as soon as practicable after the Form 477 filing window opens on July 1, 2021 but not formally submit the data at that time. Instead, the uploaded 4G LTE mobile deployment data for each filer will remain in the Form 477 system until each filer has uploaded or entered the rest of its mobile broadband and voice deployment and subscribership data as of June 30, 2021. The reporting of this additional data shall take place no later than September 1, 2021. Once all additional data has been uploaded or entered, the filer will formally submit and certify its entire filing as a whole.²⁶ To attest to the accuracy of the May 15 data as of the time of filing, and in advance of formally submitting the final Form 477 filing with all of the required data, the Companies have also voluntarily committed to upload a statement in a "readme" file that certifies that the 4G LTE broadband and voice map data they are uploading are accurate and generated in accordance with the BDC standards described herein.²⁷

IV. ORDERING CLAUSES

10. 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 sections 1.7001(b)-(c) and 1.7002, 47 CFR §§ 1.7001(b)-(c) and 1.7002, and the related FCC Form 477 Instructions are WAIVED to the extent indicated herein for AT&T Wireless, T-Mobile, U.S. Cellular, Verizon Wireless, and their subsidiaries.

11. This action is taken by the Acting Chief of the Wireless Telecommunications Bureau under delegated authority pursuant to sections 0.131 and 0.331 of the Commission's rules, 47 CFR §§ 0.131, 0.331.

FEDERAL COMMUNICATIONS COMMISSION

Joel Taubenblatt
Acting Chief, Wireless Telecommunications Bureau

²⁶ See 47 CFR § 1.7002.

²⁷ Specifically, the certification document uploaded as a "readme" file must provide as follows: "I certify under penalty of perjury that (a) I am a person with agency or authority to make this certification on behalf of the submitting party; (b) I have examined the information submitted and it is true, accurate, and correct to the best of my knowledge, information, and belief; and (c) all data and statements contained in the shapefile(s) submitted for data as of May 15, 2021, were generated in accordance with the parameters for mobile broadband service set forth in 47 CFR § 1.7004(c)(3)(i)-(iii). I understand that persons making willful false statements in any part of this data collection can be punished by fine or imprisonment, pursuant to 47 U.S.C. § 220(e). For purposes of this submission, the entry of my name here constitutes my electronic signature to this certification: [[Enter first name and last name here]]."