



PUBLIC NOTICE

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**BROADBAND DATA TASK FORCE ESTABLISHES PROCESS FOR ENTITIES TO USE
THEIR OWN SOFTWARE AND HARDWARE TO COLLECT ON-THE-GROUND TEST DATA
AS PART OF THE MOBILE BROADBAND DATA COLLECTION**

WC Docket No. 19-195

By this Public Notice, the Broadband Data Task Force, together with the Wireless Telecommunications Bureau (WTB), Office of Economics and Analytics (OEA), and Office of Engineering and Technology (OET) (collectively, the Bureau and Offices), establishes procedures for mobile wireless broadband service providers, governmental entities, and other third parties that use their own hardware and software to submit on-the-ground speed test data as part of the mobile challenge and verification processes as part of the Broadband Data Collection (BDC).

Background

In the Broadband Deployment Accuracy and Technological Availability Act (Broadband DATA Act),¹ Congress mandated that the Commission collect and disseminate more granular and consistent data from fixed and mobile broadband Internet access service providers on the availability and quality of broadband service.² Congress also required the Commission to “establish . . . processes through which the Commission can verify the accuracy of [the] data submitted”³ and to “establish a user-friendly challenge process through which consumers, State, local, and Tribal governmental entities, and other entities or individuals may submit coverage data to the Commission to challenge the accuracy of [the coverage maps created pursuant to the Broadband DATA Act or the underlying broadband availability data forming the basis of the coverage maps].”⁴ The Broadband DATA Act similarly required that the Commission create a process that “allow[s] providers to respond to challenges submitted through the challenge process.”⁵

Consistent with those requirements, the Commission required consumers, governmental entities, and other third parties challenging the accuracy of mobile broadband availability data to submit on-the-

¹ 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).

² See 47 U.S.C. § 642(a)(1)(A).

³ 47 U.S.C. § 642(a)(1)(B)(i).

⁴ 47 U.S.C. § 642(b)(5)(A).

⁵ 47 U.S.C. § 642(b)(5)(B)(iii).

ground network performance data (i.e., speed test data) as evidence in support of their mobile challenges.⁶ To respond to challenges, the Commission required providers to submit to the Commission either on-the-ground test data or infrastructure data so that Commission staff can examine the provider’s coverage in the challenged area and resolve the challenge.⁷

To provide flexibility for bulk availability challenges, the Commission does not require governmental, mobile broadband service provider, and other third-party entity challengers to use a Commission-approved speed test application to collect speed test data but instead will permit them to use their own hardware and software to collect speed test data for the mobile challenge process so long as it includes a defined set of metrics.⁸ Governmental and other third-party challengers choosing to use their own hardware and software must also submit a complete description of the methodology used to collect their data⁹ and substantiate it through the certification of a qualified engineer or official.¹⁰

Similarly, providers may use their own hardware and software to collect on-the-ground test data to respond to challenges. If a mobile provider uses hardware and software other than the FCC Speed Test app or a third-party speed test app approved by OET for use in the challenge process, it must incorporate the test methodology and collect the metrics that OET-approved apps must gather for consumer challenges and that governmental and third-party challenger speed test data must contain.¹¹ Providers who choose to use their own hardware and software to respond to challenges must submit a complete description of the methodologies used to collect their data and substantiate their data through the certification of a qualified engineer or official.¹²

⁶ *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, 1165, 1166, 1171, 1172, paras. 99, 102, 116, 118 (2021) (*Third Order*); see 47 CFR § 1.7006(e)(1)(ii), (f)(1)(i).

⁷ *Third Order*, 36 FCC Rcd at 1168, para. 108.

⁸ *Id.* at 1172, para. 117; 47 CFR § 1.7006(f)(1)(i). See also FCC, Broadband Data Collection Data Specifications for Mobile Speed Test Data at 2 (2022), <https://us-fcc.app.box.com/v/bdc-mobile-speedtest-spec> (“Entities . . . interested in submitting mobile speed tests as crowdsourced data or as part of the mobile challenge process may use their own hardware or software to conduct bulk collections of mobile speed tests. Such bulk speed test data must be submitted in the BDC system either via file upload or through use of the BDC filer API, and such data must conform to the specifications detailed below. An entity interested in submitting such data must first be authenticated in the BDC system.”). In the *Mobile Technical Requirements Order*, the Bureau and Offices noted that governmental and third-party challengers may choose to use their own software and hardware to collect on-the-ground test data for mobile challenges. *Establishing the Digital Opportunity Data Collection*, WC Docket No. 19-195, Order, DA 22-241, 2022 WL 743185, at *5, para. 13 (WTB/OEA/OET 2022) (*Mobile Technical Requirements Order*). They explained that they were “includ[ing] ‘hardware’ to capture the professional tools such as laptops, hard drives, or other hardware devices, used to collect on-the-ground data.” *Id.* at *5, para. 13 n.47.

⁹ *Third Order*, 36 FCC Rcd at 1172, para. 117; see 47 CFR § 1.7006(f)(1)(ii). In the *Mobile Technical Requirements Order*, the Bureau and Offices indicated that they would issue a public notice announcing the process and procedures for governmental and other third-party entities to document their methodology. *Mobile Technical Requirements Order*, at *5, para. 13 n.47.

¹⁰ *Third Order*, 36 FCC Rcd at 1172, para. 117; see 47 CFR § 1.7006(f)(1)(iii).

¹¹ *Mobile Technical Requirements Order* at *28, para. 67. In the *Mobile Technical Requirements Order*, the Bureau and Offices adopted technical requirements to implement the mobile challenge and verification processes, including updating the required testing parameters and data metrics for on-the-ground speed test data submissions. These parameters and metrics apply across all testing mechanisms, including in the challenge process and for on-the-ground speed test data that mobile providers submit in response to mobile verification inquiries. *Mobile Technical Requirements Order* at *1, *5, *7, paras. 1, 13, 18.

¹² *Id.* at *29, para. 68; 47 CFR § 1.7006(e)(4)(iv)(D)(1)-(2).

Process

In describing their data collection methodology, entities submitting mobile challenges and mobile providers responding to challenges must provide a narrative overview of the overall testing solution, including a description of the test procedures and whether the testing was app-based, software-based, or hardware-based; the type of software and hardware used for the testing; and, if available, a URL link to the software and hardware products used. Such parties must also indicate whether the testing software affects the natural behavior of a tested device, such as by locking the device to a particular radio access technology or spectrum band. In addition, parties must include information about the devices used in the testing, including supported radio access technologies, data service plan, and whether the devices have internal or external antennas (and the height of the external antennas and antenna gain, if applicable).¹³ Parties must also include information about the duration of speed tests and speed test servers, including server type (e.g., iperf, ookla) and main configurations between server and client (e.g., SCTP/UDP/TCP), the geographic location(s) of the server(s), the estimated number of servers, and provisioned bandwidth capacity of test servers. Parties must submit the description of their data collection methodology into the BDC system when they submit their on-the-ground speed test data.

Procedures for the preparation and formatting of mobile speed test data for submission into the BDC system are set forth in Data Specifications for Mobile Speed Test Data.¹⁴ The data specifications have been updated to include procedures for the preparation and formatting of the data collection methodology description outlined above. The BDC user guide will also be updated to provide further instructions on submitting the required information. The data specifications and user guide, along with additional information for BDC filers, including help articles, video tutorials, Frequently Asked Questions, and other materials, are available on the FCC's online Broadband Data Collection Help Center at <https://www.fcc.gov/BroadbandData/Help>.

As we have stated previously, we expect that allowing governmental and third-party entities and mobile broadband service providers to use their own speed test measurement tools will benefit the administration of the mobile challenge and verification processes.¹⁵ While such parties are not required to obtain prior approval to use their own software and hardware to collect data for the challenge process, they must submit a complete description of their data collection system and methodology as outlined above and, as we have stated, we retain the discretion to revoke the automatic grant of approval in instances where software and hardware are found to be unreliable or otherwise inconsistent with our objective of ensuring accurate mapping data.¹⁶ We also retain the discretion to require prior approval of software and hardware, or to make changes to the required metrics via notice and comment, at a later time.¹⁷

For additional information regarding the Broadband Data Collection, please visit the BDC website at <https://www.fcc.gov/BroadbandData>.

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¹³ Providers must conduct in-vehicle mobile tests (both for purposes of submitting challenge rebuttal data and on-the-ground data in response to a verification inquiry) with an antenna located inside the vehicle. *Mobile Technical Requirements Order* at *28, *40, paras. 67, 99.

¹⁴ FCC, Broadband Data Collection Data Specifications for Mobile Speed Test Data (2022), <https://us-fcc.app.box.com/v/bdc-mobile-speedtest-spec>.

¹⁵ See *Mobile Technical Requirements Order* at *29, para. 69.

¹⁶ See *id.*

¹⁷ See *id.*