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Ms. Marlene Dortch
Secretary, FCC
445 12th Street, NW
Washington DC

Re: Establishing the Digital Opportunity Data Collection, WC Docket No. 19-195; Modernizing the FCC Form 477 Data Program, WC Docket No. 11-10

Dear Ms. Dortch

On August 14, 2020, Mary Henze, Ola Oyefusi, Terri Hoskins, and the undersigned, all of AT&T, spoke via conference call with FCC staff from various Bureaus to Discuss the Digital Opportunity Data Collection *Second Report and Order and Third Further Notice of Proposed Rulemaking*. In attendance for the FCC were: Garnet Hanley, Erin Boone, Monica DeLong, Janet Young, Tom Tran, Stacy Ferraro, Will Holloway, and Jennifer Salhus, of the Wireless Telecommunications Bureau; Kirk Burgee, of the Wireline Competition Bureau; and Steve Rosenberg, Mathew Collins, Catherine Matraves, and Patrick DeGraba, of the Office of Economic Analysis. During the call, AT&T specifically discussed issues regarding standardizing additional propagation model parameters, verifying mobile coverage maps, and the challenge process with respect to mobile coverage.

Standardizing Additional Parameters

The 3rd FNPRM asks questions about whether to standardize additional propagation model parameters such as signal strength and fading statistics data.¹ As AT&T has noted previously, the Commission should not standardize such parameters. Carriers set their propagation model inputs that are suitable for their unique network capabilities. It is not possible for all carriers to use the same parameters and produce maps that accurately predict their individual network performance. Under the just adopted Order, the Commission will receive each carrier's link budget, which will include the actual values for both of these parameters. This transparency will provide the Commission more insight into the quality of the submitted maps than any type of standardization.

Similarly, the Commission should not pursue additional maps that require completely different parameters (e.g. speed, cell edge probability, or cell loading values).² Moreover, the Commission should not require carriers to produce and submit a separate "challenge evaluation map" as part of the challenge process.³ Producing such additional maps would be costly and administratively difficult to produce. Preparing high quality propagation maps that reflect actual network performance is a complex and involved process. The effort and cost to create multiple maps with different propagation

¹ *Establishing the Digital Opportunity Data Collection, Second Report and Order and Third Further Notice of Proposed Rulemaking, WC Docket Nos. 19-195, 11-10 (rel. July 17, 2020) ("Order and FNPRM")*, paragraphs 97-98.

² *Id.* at paragraph 99.

³ *Id.* at paragraph 157.



parameters or on different software to meet separate deadlines far outweighs any perceived benefit. The Commission has already Ordered the creation of maps that follow more rigorous standards than previously submitted broadband data, as well as to package an unprecedented amount of never-before-submitted data for submission. AT&T, thus, urges the Commission to, at a minimum, hold-off on pursuing additional maps until it knows whether the information it has already required is adequate.

Verifying Mobile Data

AT&T also discussed the DODC 3rd FNPRM’s proposal to require carriers to conduct annual nationwide drive testing to verify coverage of their submitted mobile broadband maps. AT&T explained the cost that this proposal would impose on carriers, as well as the potential difficulty in determining how to formulate a statistically valid sample for areas given the terrain variability nationwide.

With respect to cost, AT&T estimates that to drive test just 25% of the square kilometers of its nationwide 4G LTE coverage would cost approximately \$45 million each year and that drive testing only 10% of its coverage would still cost as much as \$18 million/year. Requiring that all carriers conduct such nationwide drive tests, especially on a regular basis, is simply too costly especially at a time when investment in 5G deployment is a top national priority. The 3rd FNPRM proposes to use a statistically valid sample where carriers would be expected to conduct a certain amount of drive tests “that is statistically appropriate for the area tested.”⁴ However, there is no indication of how an “area” would be defined which makes it difficult to assess the feasibility of developing a sample.

To be clear, AT&T does not dispute the Commission’s need to verify coverage per the Broadband DATA Act, but drive testing is not the proper solution for verifying nationwide coverage maps. Instead, AT&T believes that the Commission should first rely on the unprecedented amount of new data that it will receive from carriers as part of the DODC mapping process.⁵ If additional data is deemed useful, the FCC could, as previously proposed,⁶ collect certain confidential tower site location information, which would be a better verification tool compared to drive testing.

Challenge Process

On the issue of the mobile challenge process, AT&T suggested at the meeting that clarification would be needed for paragraphs 142 and 143 of the 3rd FNPRM. As written, it is not clear whether the proposal describes two separate challenge processes – one for map challenges and one for service quality challenges – or a single process with two categories of challenges. AT&T suggested that a single challenge of map accuracy would be most appropriate with a challenger being able to select from two categories 1) no coverage; and 2) speed slower than mapped. Staff indicated that the intent was to describe a process that matched AT&T’s single challenge suggestion.

⁴ *Id.* at paragraph 107.

⁵ *Id.* at paragraph 48.

⁶ Letter from Mary Henze, Assistant Vice President, Federal Regulatory, AT&T, to Marlene Dortch, Secretary, FCC, WC Docket 19-195 (July 8, 2020).



AT&T suggested that the challenge process would be less confusing and easier to administer if the rules for both consumers and government entities are the same. As currently proposed, the consumer challenge process does not collect enough information to allow a provider to respond. AT&T believes that the same information should be sought from consumer and government challengers and that each must contain more information than proposed in the FNPRM, and specifically the make and model of the phone used to conduct a test of availability and/or speed, the latitude/longitude of the phone at all points where coverage/speed tests are taken, and the time of day of the test. AT&T also strongly urged the Commission to require the use of specific widely available speed test applications that have been tested and “certified” to be reliable and secure. To reduce the chance of frivolous challenges, AT&T suggested that the challenge portal require all data fields to be completed before the challenge is accepted for submission.

Based on its MFII challenge experience, AT&T strongly urged the Commission not to establish the one-kilometer grid as the basis for any speed testing requirements as proposed for government challenges. The MFII requirement to conduct enough speed tests to meet the 75% coverage requirements within each grid cell was nearly impossible to achieve. AT&T shared the results of an actual professional MFII challenge that covered over 100 square kilometers and produced over a hundred speed tests.⁷ Despite all but two tests failing the 5Mbps standard, the effort “cleared” only 16 out of 138 grid cells based on the Commission’s MFII rules in an area where the results unequivocally prove there is no coverage.

Rather than asking challengers to test-to-the-grid, AT&T suggested, as a preliminary proposal, allowing challengers to simply conduct speed tests in the area they seek to challenge and submit the test results (with latitude and longitude) as part of their challenge. The Commission could then plot the challenges and overlay the grid on top in order to assess the impact of the testing. Prior to accepting challenges, the Commission would propose and seek comment on, “rules” or rebuttable assumptions by which to assess the speed test plots. For illustrative purposes only, and as an example, such a rule might state: any grid cell with a failed test would be considered “cleared” and a non-tested grid cell adjacent to the cleared cell would also be “cleared.” The provider would receive the challenge information, the test plot with grid overlay and the Commission’s initial assessment. AT&T acknowledged that developing the assessment assumptions would require some deliberation but using the grid in this fashion would make the challenge process far more accessible while providing the Commission and providers the information needed to respond. Challengers would simply need to take and record as many speed tests as practicable and submit them to the portal. The Commission may want to establish a minimum number of speed tests to qualify as a legitimate challenge, but there may not need to be any other limitations. Under the MFII test-to-the-grid approach hundreds of thousands of speed tests were disqualified simply because two other tests were not taken in the same grid cell. The grid could still play a role but using it as an assessment tool would allow the efforts of challengers to be more fairly judged.

⁷ See Exhibit A attached.



AT&T strongly supports the Commission's effort to improve broadband mapping and closing the digital divide and looks forward to continuing to work with the Commission towards these goals.

Sincerely,

/s/ Brendan F. Haggerty

Brendan F. Haggerty

cc: Garnet Hanley
Erin Boone
Monica DeLong
Janet Young
Tom Tran
Stacy Ferraro
Will Holloway
Jennifer Salhus
Steve Rosenberg
Catherine Matraves
Matthew Collins
Patrick DeGraba
Alex Espinoza
Kirk Burgee

Exhibit A

Sample AT&T MFII Challenge Process Speed Tests with One-kilometer Grid Overlaid

