**DA 16-569**

**May 19, 2016**

**Guidance on Open Internet Transparency Rule Requirements**

**GN Docket No. 14-28**

In this Public Notice, the Chief Technologist, Office of General Counsel, and Enforcement Bureau (collectively the Bureaus) offer guidance regarding acceptable methodologies for disclosure of network performance to satisfy the enhanced transparency requirements in the *2015 Open Internet Order.*[[1]](#footnote-1) Further, the Bureaus offer guidance on compliance with the point of sale disclosure requirement under the *2015 Open Internet Order.* This guidance is intended to clarify what disclosure practices will satisfy the Transparency Rule.[[2]](#footnote-2)

In the *2010 Open Internet Order*,the Commission concluded that effective disclosure of network management practices, performance characteristics, and commercial terms helps to ensure that “broadband providers will abide by open Internet principles,” enhances the general public’s and the Commission’s ability to identify and address open Internet violations, and correspondingly increases “the chances that harmful practices will not occur.”[[3]](#footnote-3) The Commission further found that these disclosures empower consumers and promote competition and investment, further reducing broadband Internet access service (BIAS) providers’ incentives and ability to engage in harmful conduct.[[4]](#footnote-4)

To achieve these objectives, the Commission adopted the Transparency Rule:

A person engaged in the provision of broadband Internet access service shall publicly disclose accurate information regarding the network management practices, performance, and commercial terms of its broadband Internet access services sufficient for consumers to make informed choices regarding use of such services and for content, application, service, and device providers to develop, market, and maintain Internet offerings.[[5]](#footnote-5)

In 2011 and in 2014, Commission staff released advisory guidance to assist BIAS providers in complying with the Transparency Rule.[[6]](#footnote-6) The *2011 Advisory Guidance* gave fixed and mobile BIAS providers guidance regarding acceptable methodologies for disclosure of network performance metrics to satisfy the Transparency Rule.[[7]](#footnote-7) For example, fixed BIAS providers could use Measuring Broadband America (MBA) data, or “disclose actual performance based on internal testing; consumer speed test data; or other data regarding network performance, including reliable, relevant data from third-party sources.”[[8]](#footnote-8) Mobile providers who had access to reliable data regarding their network performance could “disclose the results of their own or third-party testing.”[[9]](#footnote-9) For those providers without access to reliable data, the *2011 Advisory Guidance* allowed disclosure of “a Typical Speed Range (TSR) representing the range of speeds and latency that can be expected by most of their customers, for each technology/service tier offered, along with a statement that such information is the best approximation available to the broadband provider.”[[10]](#footnote-10) The *2011 Advisory Guidance* further stated that the *2010 Open Internet Order* does not require distribution of disclosure materials in hard copy or extensive training of sales employees to provide the disclosures themselves.[[11]](#footnote-11) It also stated that BIAS providers can comply with the point of sale requirement by “directing prospective customers at the point of sale, orally and/or prominently in writing, to a web address at which the required disclosures are clearly posted and appropriately updated.”[[12]](#footnote-12)

The text of the codified Transparency Rule, which was upheld by the D.C. Circuit Court in *Verizon v. FCC*,[[13]](#footnote-13) was not changed in the *2015 Open Internet Order*. Instead, the *2015 Open Internet Order* enhanced the Transparency Rule by clarifying certain aspects of the rule including disclosure of specific commercial terms, performance characteristics, and network management practices.[[14]](#footnote-14) Among other things, BIAS providers are specifically required to disclose expected and actual download and upload speeds, latency, and packet loss, but are no longer required to disclose the typical frequency of congestion.[[15]](#footnote-15) In addition, the *2015 Open Internet Order* reconfirmed—but did not modify—the Transparency Rule requirements around disclosure at the point of sale, requiring “at a minimum, the prominent display of disclosures on a publicly available website and disclosure of relevant information.”[[16]](#footnote-16)

In May 2015, the Commission issued the *PRA Notice*[[17]](#footnote-17) seeking comment on the information collection requirements for the enhancements to the Transparency Rule made in the *2015* *Open Internet Order*. The comments filed in response reflected concern regarding some of the requirements.[[18]](#footnote-18) Some areas of particular concern were the geographic and peak hour disclosure requirements and the packet loss disclosure.[[19]](#footnote-19) They also noted concerns about the lack of a mobile Measuring Broadband America safe harbor and uncertainty about whether the point of sale disclosure requirement had changed.[[20]](#footnote-20)

To provide further clarity regarding the Transparency Rule, this Public Notice offers guidance for compliance with certain aspects of the Transparency Rule. We emphasize that, with the exception of the requirements for participation in the MBA safe harbor, any examples provided here are not exhaustive; BIAS providers may implement alternative approaches that disclose information sufficient to adequately inform consumers and relevant third parties.

# Network performance Metrics

## Guidance on Disclosure of Network Performance Metrics

*Service Tiers*. The *2015 Open Internet Order* clarified that, “for mobile broadband providers, the obligation in the Transparency Rule to disclose performance characteristics for ‘each broadband service’ refers to separate disclosures for services with each technology (e.g., 3G and 4G)”.[[21]](#footnote-21) We similarly clarify that, for fixed BIAS providers, the obligation in the Transparency Rule to disclose performance characteristics for “each broadband service” refers to separate disclosures for services with each *technology* (e.g., digital subscriber line (DSL), cable, fiber, or satellite) and *service tier* (e.g., 50 Mbps download / 10 Mbps upload), as it is the combination of technology and service tier that BIAS providers use to market the service.[[22]](#footnote-22)

*Disclosure of Actual Network Performance Metrics*. The *2015 Open Internet Order* requires all BIAS providers to disclose both *expected* and *actual* download and upload speeds, latency, and packet loss for each service.[[23]](#footnote-23) Here, we give guidance on disclosure of *actual* network performance metrics.

The Measuring Broadband America (MBA) program, which may be used by fixed BIAS providers as a safe harbor in meeting the requirement to disclose *actual* network performance,[[24]](#footnote-24) presents both median speeds and percentiles of speed.[[25]](#footnote-25) We clarify that providers may comply with the requirement to disclose *actual* speeds—both download and upload—by disclosing either the median speed or a range of actual speeds that includes the median speed (e.g., 25th to 75th percentile). However, we note that speed ranges may be more appropriate when there is substantial variation in speed, e.g. for fixed BIAS using DSL technology[[26]](#footnote-26) and for mobile BIAS.[[27]](#footnote-27) Similarly, latency may be disclosed using either the median latency or a range of actual latencies that includes the median latency (e.g., 25th to 75th percentile). If speed or latency ranges are used, the percentiles used to determine the endpoints of the ranges must also be disclosed.[[28]](#footnote-28) Packet loss may be disclosed as the average packet loss.[[29]](#footnote-29) In order to ensure that the *actual* and *expected* network performance metrics can be compared, it is best to provide *actual* and *expected* performance in comparable formats. For example, if *actual* download speed is provided as a range, the *expected* download speed should use a range with the same percentile endpoints.

*Geographic Granularity for Actual Network Performance Metrics*. The *2015 Open Internet Order* requires that disclosures of *actual* speed, latency and packet loss “be reasonably related to the performance the consumer would likely experience in the geographic area in which the consumer is purchasing service.”[[30]](#footnote-30) BIAS performance may vary by location.[[31]](#footnote-31) For fixed BIAS, however, except for fine-grained variations in performance based on the distance between a consumer and network equipment, commenters agree that there are few variations in actual BIAS performance across a BIAS provider’s service area for a particular combination of technology and service tier unless the BIAS provider is using different network management practices in different geographical areas.[[32]](#footnote-32) Therefore, we clarify that fixed BIAS providers may meet this requirement by disclosing *actual* performance metrics for “each broadband service”[[33]](#footnote-33) in each geographic area in which the service has a distinctive set of network performance metrics (operational area). We expect that operational areas will be determined by the technology used and by network management practices, and that many fixed BIAS providers will have a single operational area for each broadband service offered.

For mobile BIAS, the *2015 Open Internet Order* stated that, “with the exception of small providers, mobile broadband providers can be expected to have access to reliable actual data on performance of their networks representative of the geographic area in which the consumer is purchasing service – through their own or third-party testing – that would be the source of the disclosure” of actual network performance.[[34]](#footnote-34) Mobile BIAS performance may vary based on a BIAS provider’s access to spectrum in various geographic areas.[[35]](#footnote-35) We therefore clarify that mobile BIAS providers with access to reliable actual data on network performance may meet this requirement by disclosing *actual* performance metrics for each Cellular Market Area (CMA) in which the service is offered, as further described below.[[36]](#footnote-36)

*Disclosure of Expected Network Performance Metrics*. BIAS providers are also required to disclose *expected* download and upload speeds, latency, and packet loss.[[37]](#footnote-37) We clarify that there is no corresponding requirement to disclose different *expected* network performance metrics in different geographic areas. However, to ensure that information regarding performance is accurate and sufficient for consumers to make informed choices*, expected* network performance disclosed for a geographic area should not exceed *actual* network performance in that geographic area.

*Peak Usage Periods*. The *2015 Open Internet Order* stated the Commission’s expectation that network performance would be measured “during times of peak usage”.[[38]](#footnote-38) Some commenters asked whether times of peak usage would need to vary by geographic area, e.g. according to whether the area is dominantly commercial or residential.[[39]](#footnote-39) We clarify that peak usage periods may be based solely on the local time zone.[[40]](#footnote-40) We further clarify that BIAS providers retain flexibility to determine the appropriate peak usage periods for their network performance metrics but must disclose the peak usage periods chosen for such disclosures.

## Guidance for BIAS Providers using the Measuring Broadband America Safe Harbor.

*Fixed BIAS Network Performance*. Participation in the Measuring Broadband America (MBA) program remains a safe harbor for fixed BIAS providers in meeting the requirement to disclose actual network performance.[[41]](#footnote-41) As a result, fixed BIAS providers may disclose their results from the MBA program, for each service for which the program provides network performance metrics, as a sufficient representation of actual download and upload speeds, actual latency, and actual packet loss of those services.[[42]](#footnote-42)

*Mobile BIAS Network Performance*. The *2015 Open Internet Order* stated that the MBA program could at the appropriate time be declared a safe harbor for *mobile* BIAS providers in meeting the requirement to disclose actual network performance.[[43]](#footnote-43) The MBA program has been measuring mobile BIAS performance since November 2013.[[44]](#footnote-44) We anticipate that the MBA program will publish its first Mobile Broadband Report in 2016 for those services for which it has a sufficient national sample size. The program will provide, at a minimum, network performance metrics for each such service for each CMA in which the program has a sufficient CMA sample size, and additional sets of these network performance metrics aggregated among sets of other CMAs.[[45]](#footnote-45) Today, we establish that mobile BIAS providers may disclose their results from the mobile MBA program as a sufficient disclosure of actual download and upload speeds, actual latency, and actual packet loss of a service[[46]](#footnote-46) if the results satisfy the above sample size criteria and if the MBA program has provided CMA-specific network performance metrics of the service in CMAs with an aggregate population of at least one half of the aggregate population of the CMAs in which the service is offered.

## Guidance for BIAS Providers not using the Measuring Broadband America Safe Harbor.

*Fixed BIAS Network Performance*. As initially articulated in the *2011 Advisory Guidance*, fixed BIAS providers not using the MBA safe harbor may disclose actual network performance metrics based on the MBA methodology, “internal testing; consumer speed test data; or other data regarding network performance, including reliable, relevant data from third-party sources.”[[47]](#footnote-47) In the *2015 Open Internet Order*,the Commission explained that disclosed actual network performance metrics should be based on measurements during peak usage periods.[[48]](#footnote-48) It also explained that any of these methodologies may be used as the basis for measurement of actual download and upload speeds, actual latency, and actual packet loss, provided that the methodology be disclosed and be grounded in commonly accepted principles of scientific research, good engineering practices, and transparency.[[49]](#footnote-49)

*Mobile BIAS Network Performance*. Commenters note that there is a tradeoff between the likely per capita cost incurred to obtain performance metrics in a geographic area and the population density in that geographic area.[[50]](#footnote-50) We interpret the requirement for disclosures of actual speed, latency, and packet loss to “be reasonably related to the performance the consumer would likely experience in the geographic area in which the consumer is purchasing service” [[51]](#footnote-51) to be satisfied by sufficient disclosures of aggregate actual network performance in low population density areas. Specifically, mobile BIAS providers that, instead of taking advantage of the MBA safe harbor, measure network performance by their own or third-party testing may disclose performance metrics for each CMA in which the service is offered, except that actual network performance may be aggregated among CMAs with a population density below 250 people per square mile.[[52]](#footnote-52)

*Routes*. The Transparency Rule requires a BIAS provider to disclose “accurate information regarding the network management practices, performance, and commercial terms of its broadband Internet access services sufficient for consumers to make informed choices regarding use of such services and for content, application, service, and device providers to develop, market, and maintain Internet offerings.”[[53]](#footnote-53) The routes over which network performance metrics are measured should thus be chosen to accurately represent the actual network performance experienced by consumers within the designated geographic area. The *2010 Open Internet Order* noted that “our rules apply only as far as the limits of a broadband provider’s control over the transmission of data to or from its broadband customers”.[[54]](#footnote-54) The *2015 Open Internet Order* noted that “congestion may originate beyond the broadband provider’s network and the limitations of a broadband provider’s knowledge of some of these performance [metrics]”.[[55]](#footnote-55) Therefore, a sufficient representation of actual network performance of the service may be obtained from measurements of speed, latency, and packet loss on a representative sampling of routes between end users and the points of interconnection with edge providers or other networks. Fixed BIAS providers may, for example, measure speed, latency, and packet loss between measurement clients in broadband modems and measurement servers that are located in close proximity to the links on which traffic is exchanged with edge providers or other networks. As an alternative to placing measurement clients in broadband modems, a fixed BIAS provider may place measurement clients in access networks, provided that this internal testing accurately measures performance metrics in a manner that represents the performance experienced by consumers of the service. Mobile BIAS providers may, for example, achieve a representative sampling of end users by running measurement clients on end-user devices (e.g., using consumer speed test data), by placing measurement clients in locations near a representative set of mobile broadband consumers (e.g., by combining drive-test data with an estimate of the reduction in speed from drive-test locations to user locations), or by measuring performance in the network and estimating the relationship between this measured performance and that experienced by end users.

# point of sale requirement

The Transparency Rule, as adopted in the *2010 Open Internet Order*, [[56]](#footnote-56)requires BIAS providers to disclose network management practices, performance characteristics, and commercial terms “at the point of sale.”[[57]](#footnote-57) As discussed in more detail below, this requirement was not modified in the *2015 Open Internet Order*. As the Commission has explained previously, BIAS providers are not required to provide hard copies of the disclosures required under the Transparency Rule at the point of sale and instead may direct consumers to links to online disclosures.[[58]](#footnote-58) However, for disclosures made through such links to be sufficient under the Transparency Rule, BIAS providers must ensure that consumers actually receive the information necessary to make informed decisions prior to making a final purchasing decision at all potential points of sale, including in a store, over the phone, and online.

*Background*. During the rulemaking proceeding leading up to the adoption of the Transparency Rule in the *2010 Open Internet Order*, some commenters raised concerns that a point of sale requirementcould be interpreted to compel distribution of physical materials at retail outlets and extensive training of sales employees at retail outlets as well as at telephone and Internet sales centers that may be operated by BIAS providers or other third parties. The Commission addressed those concerns in the *2010 Open Internet Order* by stating that “broadband providers must, at a minimum, prominently display or provide links to disclosures on a publicly available, easily accessible website that is available to current and prospective end users and edge providers.”[[59]](#footnote-59) The Commission further explained that “broadband providers may be able to satisfy the transparency rule through a single disclosure.”[[60]](#footnote-60)

In the *2011 Advisory Guidance*, the Commission’s Office of General Counsel and Enforcement Bureau issued joint guidance on the Transparency Rule, including how the point of sale requirement should be interpreted. [[61]](#footnote-61) The *2011 Advisory Guidance* states that the *2010 Open Internet Order* does not require distribution of disclosure materials in hard copy, or extensive training of sales employees to provide the disclosures themselves.[[62]](#footnote-62) It also states that BIAS providers can comply with the point of sale requirement by “directing prospective customers at the point of sale, orally and/or prominently in writing, to a web address at which the required disclosures are clearly posted and appropriately updated.”[[63]](#footnote-63)

The text of the Transparency Rule, upheld by the D.C. Circuit Court in *Verizon v. FCC*,[[64]](#footnote-64) was not changed in the *2015 Open Internet Order*. The *2015 Open Internet Order*, however, reconfirms that the Transparency Rule requires “at a minimum, the prominent display of disclosures on a publicly available website and disclosure of relevant information.”[[65]](#footnote-65) While the Commission made some enhancements to the disclosures required under the rule in the *2015 Open Internet Order*, the requirements relating to point of sale disclosures were not modified.[[66]](#footnote-66)

In response to the *PRA Notice*,[[67]](#footnote-67) several commenters expressed concern about perceived changes to the point of sale disclosure requirements.[[68]](#footnote-68) Specifically, these commenters point to language in a footnote in the *2015 Open Internet Order*, which states that:

[b]roadband providers must actually disclose information required for consumers to make an “informed choice” regarding the purchase or use of broadband services at the point of sale. *It is not sufficient for broadband providers simply to provide a link to their disclosures*.[[69]](#footnote-69)

This language apparently raised concerns that the Commission intended to eliminate the option for BIAS providers to provide point of sale disclosures by directing prospective customers to a web address and that providers would be required under the enhanced Transparency Rule to print and distribute paper materials at every point of sale location.[[70]](#footnote-70) According to these commenters, such a disclosure requirement would be unduly burdensome, particularly for prepaid wireless services because there is little space available on packaging containing prepaid devices and services.[[71]](#footnote-71) These commenters contend that wireless BIAS providers cannot reasonably be expected to present all or even a portion of the detailed disclosures required by the Commission under the Transparency Rule on packaging.[[72]](#footnote-72) CTIA notes that mobile BIAS providers often rely on multiple, distinct sales channels (e.g*.*, online outlets, carrier stores, big box stores, small retail shops, independent dealers, and call centers)[[73]](#footnote-73) to sell their products and services, and that each of these channels likely would have different systems and processes that would need to be modified in order to comply with a requirement to distribute hard copies of all disclosures.[[74]](#footnote-74)

*Discussion*. We clarify that in the *2015 Open Internet Order*, the Commission did not change the requirement that disclosures required under the Transparency Rule be prominently displayed “on a publicly available website” and made at the point of sale, nor did the Commission eliminate the permissibility of making disclosures at the point of sale by directing consumers to a website link.[[75]](#footnote-75)

The Commission’s statement that “it is not sufficient for broadband providers simply to provide a link to their disclosures” was intended to explain that, while disclosures may be made via a link to a website, for those disclosures to be meaningful, BIAS providers must ensure that consumers actually receive any Open Internet-related information that is relevant to their purchasing decision at all potential points of sale, including in a store, over the phone, and online. BIAS providers should ensure that their point of sale disclosure methods actually lead potential customers to the relevant disclosure information so that informed purchasing decisions can be made by those customers.

*Safe Harbor for Form of Disclosure to Consumers*.In the *2015 Open Internet Order*, the Commission determined that there should be a voluntary safe harbor for the format and nature of the disclosures to consumers required under the Transparency Rule. To take advantage of the safe harbor, a BIAS provider must provide a consumer-focused, standalone disclosure.[[76]](#footnote-76) The Commission tasked the Consumer Advisory Committee with developing and recommending a disclosure format.[[77]](#footnote-77) The safe harbor disclosure format was approved by the relevant Bureaus and publicly released on April 4, 2016.[[78]](#footnote-78) Accordingly, a BIAS provider that wishes to qualify for the safe harbor must use the safe harbor format for disclosures made at the point of sale, but also may choose not to take advantage of the safe harbor. Thus, a provider may choose to make the disclosures in the safe harbor format at retail outlets and ensure that consumers have access to disclosures in that format at the other various points of sale.

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1. *Protecting and Promoting the Open Internet*, GN Docket No. 14-28, Report and Order on Remand, 30 FCC Rcd 5601, 5673-75, para. 166 (2015) (*2015 Open Internet Order*), *pets. for review pending sub nom USTA v. FCC No. 15-1063* (D.C. Cir. filed May 22, 2015). When it adopted the *2015 Open Internet Order*, the Commission cited approvingly previous staff guidance “in interpreting and applying the general requirements of the transparency rule” and anticipated that “further such guidance may be appropriate concerning the transparency rule.” *Id.* at 5682, para. 185. Parties have raised concerns about disclosures regarding network performance. *See*, *e.g.*, AT&T PRA Comments at 4-5, 12, 17-18, 19-20, 22-27 (July 20, 2015); CTIA PRA Comments at 13-14, 24-25 (July 20, 2015); Mobile Future PRA Comments at 6-7 (July 20, 2015); USTelecom PRA Comments at 9-10, 14-15 (July 20, 2015). Anticipating the need to address these kinds of concerns, the Order delegated to the Chief Technologist authority to provider further guidance on the subject. *2015 Open Internet Order*, 30 FCC Rcd at 5673-75, para. 166. [↑](#footnote-ref-1)
2. The Transparency Rule under the *2010 Open Internet Order* remains in effect. The Commission will publish a notice in Federal Register announcing an effective date for the transparency rule enhancements upon approval of the modified information collection by the Office of Management and Budget. [↑](#footnote-ref-2)
3. *Preserving the Open Internet*, GN Docket No. 09-191, WC Docket No. 07-52, Report and Order, 25 FCC Rcd 17905, 17937, 17941, paras. 56, 59 (2010) (*2010 Open Internet Order*), *aff’d in relevant part* *Verizon v. FCC*, 740 F.3d 623 (D.C. Cir. 2014). [↑](#footnote-ref-3)
4. *Id.* at 17940, para. 59. [↑](#footnote-ref-4)
5. 47 CFR § 8.3. [↑](#footnote-ref-5)
6. *See* *FCC Enforcement Bureau and Office of General Counsel Issue Advisory Guidance for Compliance with Open Internet Transparency Rule*, Public Notice, 26 FCC Rcd 9411, 9414-15 (2011)(*2011 Advisory Guidance*); *FCC Enforcement Advisory, Open Internet Transparency Rule: Broadband Providers Must Disclose Accurate Information to Protect Consumers*, Public Notice, 29 FCC Rcd 8606, 8607 (2014) (*2014 Advisory Guidance*). To the extent they are not superseded by the *2015 Open Internet Order* or this guidance, the *2011 Advisory Guidance* and *2014 Advisory Guidance* continue to apply to enhancements made to the Transparency Rule. *See* Letter from Thomas Cohen, Counsel for the American Cable Association, to Marlene H. Dortch, Secretary, FCC, GN Docket No. 14-28, at (filed Oct. 2, 2015) (requesting clarification regarding the effectiveness of past guidance). [↑](#footnote-ref-6)
7. *2011 Advisory Guidance*, 26 FCC Rcd at 9411-18. [↑](#footnote-ref-7)
8. *Id.* at 9414-15. [↑](#footnote-ref-8)
9. *Id.* at 9415. [↑](#footnote-ref-9)
10. *Id.* [↑](#footnote-ref-10)
11. *Id.* at 9413. [↑](#footnote-ref-11)
12. *Id*. at 9414. [↑](#footnote-ref-12)
13. *See Verizon v. FCC*, 740 F.3d 623. [↑](#footnote-ref-13)
14. *See 2015 Open Internet Order*, 30 FCC Rcd at 5672-79, paras. 162-175. [↑](#footnote-ref-14)
15. *Id.* [↑](#footnote-ref-15)
16. *Id.* at 5677, para. 171. [↑](#footnote-ref-16)
17. Federal Communications Commission, Information Collection Being Reviewed by the Federal Communications Commission, 80 Fed. Reg. 29000 (May 20, 2015) (PRA Notice). [↑](#footnote-ref-17)
18. *See, e.g.*, AT&T PRA Comments at 4-6, 17-18, 20-27, 29-30, 32-33, 37-41; CTIA PRA Comments at 13-14, 17-25; Mobile Future PRA Comments at 6-7, 9; USTelecom PRA Comments at 9-10, 14-15. [↑](#footnote-ref-18)
19. *See* AT&T PRA Comments at 4-6, 17-18, 20-27, 30; CTIA PRA Comments at 13-14, 22, 24-25; Mobile Future PRA Comments at 6, 9; USTelecom PRA Comments at 9-10, 14-15. [↑](#footnote-ref-19)
20. *See* AT&T PRA Comments at 5, 20, 29; CTIA PRA Comments at 13; Mobile Future PRA Comments at 6-7. [↑](#footnote-ref-20)
21. *2015 Open Internet Order*, 30 FCC Rcd at 5674, para. 166. [↑](#footnote-ref-21)
22. *See 2010 Open Internet Order*, 25 FCC Rcd at 17939, para. 56 (“*Service Description*: A general description of the service, including the service technology, expected and actual access speed and latency, and the suitability of the service for real-time applications.”). [↑](#footnote-ref-22)
23. *See* *2015 Open Internet Order*, 30 FCC Rcd at 5673-74, paras. 165-166. The MBA program measures speed by the throughput over a five second time window, latency by the round trip time between an end user and an off-net measurement server, and packet loss by the percentage of packets transmitted from an end user to a measurement server for which no acknowledgement was received. The detailed methodology is available in the Technical Appendix of the 2015 Measuring Broadband America Report. FCC, 2015 Technical Appendix; Measuring Broadband America Fixed Broadband: A Report on Consumer Fixed Broadband Performance in the US (2015), http://data.fcc.gov/download/measuring-broadband-america/2015/Technical-Appendix-fixed-2015.pdf. [↑](#footnote-ref-23)
24. *2015 Open Internet Order*, 30 FCC Rcd at 5674-75, n.411. [↑](#footnote-ref-24)
25. *See* FCC*,* 2015 Measuring Broadband America Fixed Broadband Report: A Report on Consumer Fixed Broadband Performance in the US at 30-36 (2015), <http://data.fcc.gov/download/measuring-broadband-america/2015/2015-Fixed-Measuring-Broadband-America-Report.pdf> (2015 Fixed MBA Report). [↑](#footnote-ref-25)
26. *See* *id.* at 8. [↑](#footnote-ref-26)
27. *See* *2015 Open Internet Order*, 30 FCC Rcd at 5674, n.409 (“Given that the performance of mobile broadband networks is subject to a greater array of factors than fixed networks, we note that disclosure of a range of speeds may be more appropriate for mobile broadband consumers.”), n.410 (“Per the 2011 Advisory Guidance, those mobile broadband providers that ‘lack reasonable access’ to reliable information on their network performance metrics may disclose a ‘Typical Speed Range (TSR)’ to meet the requirement to disclose actual performance.”). [↑](#footnote-ref-27)
28. The percentiles used should be sufficient for consumers to make informed choices regarding the use of such services and for content, application, service, and device providers to develop, market, and maintain Internet offerings. [↑](#footnote-ref-28)
29. *See* 2015 Fixed MBA Report at 18. [↑](#footnote-ref-29)
30. *2015 Open Internet Order*, 30 FCC Rcd at 5674, para. 166. [↑](#footnote-ref-30)
31. *See* 2015 Fixed MBA Report at 14-17. [↑](#footnote-ref-31)
32. *See* AT&T PRA Comments at 20-21*;* Letter from Fred Baker, Fellow, and Russ Gyurek, Director, Cisco Systems Inc., to Marlene H. Dortch, Secretary, FCC, GN Docket No. 14-28 (Nov. 2, 2015) (Cisco *Ex Parte*) at 2; Letter from Steven F. Morris, Vice President and General Counsel, NCTA, to Marlene H. Dortch, Secretary, FCC, GN Docket No. 14-28 (Nov. 25, 2015) (NCTA *Ex Parte*) at 2. [↑](#footnote-ref-32)
33. *See supra* Part I.A (discussing service tiers). [↑](#footnote-ref-33)
34. *2015 Open Internet Order*, 30 FCC Rcd at 5674, para. 166. [↑](#footnote-ref-34)
35. *See, e.g.*,Andrea Goldsmith, Wireless Communications 505-527 (2005). [↑](#footnote-ref-35)
36. *See* *infra* Parts I.B, I.C. [↑](#footnote-ref-36)
37. *2015 Open Internet Order*, 30 FCC Rcd at 5673-74, paras. 165-166. [↑](#footnote-ref-37)
38. *Id.* at 5674, para. 166. [↑](#footnote-ref-38)
39. *See* ATT PRA Comments at 25-27; CTIA PRA Comments at 24-25. [↑](#footnote-ref-39)
40. *See* 2015 Fixed MBA Report at 32 (defining the peak usage period for the 2015 Fixed MBA Report as between 7:00 p.m. and 11:00 p.m. local time). [↑](#footnote-ref-40)
41. *2015 Open Internet Order*, 30 FCC Rcd at 5674-75, n.411. [↑](#footnote-ref-41)
42. *See* *2011 Advisory Guidance*, 26 FCC Rcd at 9414-9415. Fixed BIAS providers should inform the MBA program for each broadband service offered if there is more than one operational area so that the MBA program may provide separate sets of network performance metrics as needed. The safe harbor is available only for those services for which the program provides network performance metrics, which is subject to the program’s policies regarding the minimum number of subscribers to a service and the minimum number of panelists in a service. [↑](#footnote-ref-42)
43. *2015 Open Internet Order*, 30 FCC Rcd at 5674, para. 166. [↑](#footnote-ref-43)
44. *See* Press Release, FCC, Fact Sheet: FCC Unveils New, Free Speed Test App to Empower Consumers with U.S. Mobile Broadband Performance Information (Nov. 14, 2013), <https://www.fcc.gov/document/fcc-unveils-mobile-broadband-speed-test-app-empower-consumers>. [↑](#footnote-ref-44)
45. *See* *2015 Open Internet Order*, 30 FCC Rcd at 5674, n.410 (“In any event, we expect that mobile broadband providers’ disclosure of actual performance data will be based on accepted industry practices and principles of statistical validity.”). The Chief Technologist, with consultation of the Wireless Telecommunications Bureau and the Office of Engineering and Technology, will determine policies regarding sufficient national and CMA sample sizes. [↑](#footnote-ref-45)
46. There is no requirement to disclose different *expected* network performance metrics in different geographical areas. For instance, a mobile BIAS provider may choose to advertise a single set of network performance metrics nationally, providing the advertised *expected* performance does not exceed the *actual* network performance in each CMA in which the MBA program has provided CMA-specific metrics, and does not exceed the aggregate *actual* network performance in each set of other CMAs. Alternatively, it may choose to advertise one set of network performance metrics in some CMAs and another set in other CMAs, provided that each such advertisement similarly does not exceed the actual network performance in the corresponding geographical areas. *See supra* Part 1.A. [↑](#footnote-ref-46)
47. *2011 Advisory Guidance* 26 FCC Rcd at 9414-15. [↑](#footnote-ref-47)
48. *2015 Open Internet Order*, 30 FCC Rcd at 5674, para. 166. [↑](#footnote-ref-48)
49. *Id.* at 5675, n.412. [↑](#footnote-ref-49)
50. *See* AT&T PRA Comments at 16-18. [↑](#footnote-ref-50)
51. *2015 Open Internet Order*, 30 FCC Rcd at 5674, para. 166. [↑](#footnote-ref-51)
52. There is no requirement to disclose different *expected* network performance metrics in different geographical areas. For instance, a mobile BIAS provider may choose to advertise a single set of network performance metrics nationally, providing the advertised *expected* performance does not exceed the *actual* network performance in each CMA with a population density above 250 people per square mile, and does not exceed the aggregate *actual* network performance in all other CMAs. Alternatively, it may choose to advertise one set of network performance metrics in some CMAs and another set in other CMAs, provided that each such advertisement similarly does not exceed the actual network performance in the corresponding geographical areas. *See supra* Part I.A. [↑](#footnote-ref-52)
53. 47 CFR § 8.3. [↑](#footnote-ref-53)
54. *2010 Open Internet Order*, 25 FCC Rcd at 17933, n.150. [↑](#footnote-ref-54)
55. *2015 Open Internet Order*, 30 FCC Rcd at 5675-76, para. 168. [↑](#footnote-ref-55)
56. *2010 Open Internet Order,* 25 FCC Rcd at 17936-41, paras. 53-61. [↑](#footnote-ref-56)
57. *2010 Open Internet Order,* 25 FCC Rcd at 17940, para. 57. [↑](#footnote-ref-57)
58. *2011 Advisory Guidance,* 26 FCC Rcd at 9413-14. [↑](#footnote-ref-58)
59. *2010 Open Internet Order,* 25 FCC Rcd at 17939-40, paras. 57-58 & n.186 (“[W]e expect that broadband providers will make disclosures in a manner accessible by people with disabilities.”). [↑](#footnote-ref-59)
60. *Id.* at 17940, para. 58. [↑](#footnote-ref-60)
61. *2011 Advisory Guidance*, 26 FCC Rcd at 9411. [↑](#footnote-ref-61)
62. *Id.* at 9413. [↑](#footnote-ref-62)
63. *Id*. at 9414. [↑](#footnote-ref-63)
64. *See Verizon v. FCC*, 740 F.3d 623. [↑](#footnote-ref-64)
65. *Id.* at 5677, para. 171. [↑](#footnote-ref-65)
66. *Id.* at 5672-79, paras. 162-175. [↑](#footnote-ref-66)
67. PRA Notice, 80 Fed. Reg. 29000. [↑](#footnote-ref-67)
68. *See*, *e.g.*, CTIA PRA Comments at 6, AT&T PRA Comments at 17. [↑](#footnote-ref-68)
69. *2015 Open Internet Order*, 30 FCC Rcd at 5677, n.424 (emphasis added). [↑](#footnote-ref-69)
70. AT&T PRA Comments at 35, CTIA PRA Comments at 10, USTelecom PRA Comments at 11. [↑](#footnote-ref-70)
71. *Id.* [↑](#footnote-ref-71)
72. CTIA PRA Comments at 20. [↑](#footnote-ref-72)
73. *Id.* USTelecom also states that “typical providers have multiple point of sale channels including store fronts (provider-owned and other retail outlets such as Best Buy and Wal-Mart), call centers, and website. To bar notice by a website link to customers who seek service via website or telephone, in particular, would add considerable layers and cost to the disclosure process.” USTelecom PRA Comments at 15. [↑](#footnote-ref-73)
74. USTelecom PRA Comments at 15. [↑](#footnote-ref-74)
75. *2015 Open Internet Order,* 30 FCC Rcd at 5677, para. 171; *2011 Advisory Guidance*, 26 FCC Rcdat 9413. [↑](#footnote-ref-75)
76. *2015 Open Internet Order,* 30 FCC Rcd at 5680, para. 179. [↑](#footnote-ref-76)
77. *Id.* at 5680-81, paras. 179-180. [↑](#footnote-ref-77)
78. *Consumer and Governmental Affairs, Wireline Competition, and Wireless Telecommunications Bureaus Approve Open Internet Broadband Consumer Labels*, GN Docket No. 14-28, Public Notice, DA 16-357 (CGB/WCB/WTB 2015) (*Consumer Broadband Label Notice*). [↑](#footnote-ref-78)