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BROADBAND TRUTH-IN-LABELING EMPOWERING CONSUMER CHOICE THROUGH STANDARDIZED DISCLOSURE

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ABOUT THE OPEN TECHNOLOGY INSTITUTE

The Open Technology Institute at New America is committed to freedom and social justice in the digital age. To achieve these goals, it intervenes in traditional policy debates, builds technology, and deploys tools with communities. OTI brings together a unique mix of technologists, policy experts, lawyers, community organizers, and urban planners to examine the impacts of technology and policy on people, commerce, and communities. Our current focus areas include surveillance, privacy and security, network neutrality, broadband access, and Internet governance.

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Introduction

As a consumer in the United States, it is extraordinarily difficult to make informed decisions about Internet service providers (ISPs) and their offerings. As recently as June 2015, the American Consumer Satisfaction Index (ACSI) found that customer satisfaction with ISP websites is 66%, “well below the national average” of 77.9% for websites overall.¹ The Federal Communications Commission (FCC) also reports widespread consumer confusion over ISPs’ offerings. In the *2015 Open Internet Order*, the FCC noted “numerous complaints from consumers” regarding ISP disclosures, and explained, “consumers continue to express concern that the speed of their service falls short of advertised speeds, that billed amounts are greater than advertised rates, and that consumers are unable to determine the source of slow or congested service.”²

This is not a new problem. The Open Technology Institute (OTI) reported widespread confusion several years ago, and in 2009 we called for the implementation of a “Broadband Truth-in-Labeling” program to encourage ISPs to present information about their service packages in a uniform format that would enable consumers to better understand and compare offerings from different ISPs.³

The FCC has worked to address consumer confusion and related problems. FCC regulations detail the disclosures that ISPs must make to the public regarding their services, and the FCC updated these regulations as part of the *2015 Open Internet Order*. Recognizing the value of a standardized disclosure format that facilitates side-by-side comparisons, and citing both OTI’s Broadband Truth-in-Labeling proposal and related recommendations from the Open Internet Advisory Committee, as part of the *Order* the FCC also established “a voluntary safe harbor for the format and nature of the required disclosure to consumers.”⁴ But the FCC noted that the record “was lacking on specific details as to how such a disclosure should be formatted” and declined to mandate the exact format at that time. Instead, the FCC directed its Consumer Advisory Committee to “formulate and submit to the Commission a proposed disclosure format, based on input from a broad range of stakeholders” by the end of October 2015.⁵

In what hopefully will be a useful resource as the FCC and Consumer Advisory Committee work to develop a standardized disclosure format for the voluntary safe harbor established by the *2015 Open Internet Order*, this document updates the original Broadband Truth-in-Labeling proposal first offered by OTI in 2009. The new format has been redesigned to reflect the FCC’s current rules on ISP transparency. This format also takes into consideration research regarding consumer decision-making, as well as OTI’s unique experience examining ISPs disclosures to collect the information used to inform OTI’s annual *Cost of Connectivity* reports.⁶

Consumers Need a Standardized Disclosure Format

Consumers need a standardized disclosure format. At present, the lack of standardization inhibits consumers from effectively comparing available broadband service offerings. Compounding the problem, the same lack of standardization also proves problematic for researchers and information intermediaries who might otherwise aggregate available information about broadband service and repackage it into useful secondary resources for consumers. In addition, research shows that individual consumers are not able to conduct the necessary work themselves to translating non-uniform disclosures for the purposes of comparison. This is why scholars of consumer decision-making have supported label-like standardized disclosures.

Current ISP disclosures are very difficult for consumers to compare because the lack of uniformity hinders comparison, and because consumers often misinterpret the information presented. With respect to the first problem, broadband consumers find themselves comparing apples and oranges, because ISPs present information about their service packages in different places, using different formats, and using a variety of different metrics. With respect to the second problem, the limited information that ISPs do provide often does not give consumers a realistic impression of the product they will receive. For instance, broadband subscribers may find that the actual performance of their service regularly falls far below the advertised speeds. Many consumers set their expectations based on phrases like “up to 25 Mbps,”⁷ only to be frustrated when their service falls far below the advertised speed.⁸ Pricing information can be similarly confusing—the service fees advertised on ISPs’ websites

often reflect temporary promotional prices and do not include things like taxes and mandatory equipment rental, and thus do not give consumers an accurate indication of the total monthly charges they will normally incur. ISPs may also levy additional charges for installation, modem rentals, or heavy bandwidth consumption, information that is often hidden or not apparent to consumers at the time of purchase.⁹

Not only are consumers confused by ISPs' own disclosures, but researchers and information intermediaries are as well, contributing to a dearth of helpful secondary sources that might aggregate information across different service providers into easily digestible formats for comparison. The few organizations that do aggregate information—such as OTI, in its annual *Cost of Connectivity* reports—find that their ability to conduct meaningful analysis of the collected information is limited due to the same lack of standardization that confuses consumers.¹⁰ Indeed, even institutions such as the Organisation for Economic Co-operation and Development (OECD), whose Broadband Portal hosts decades' worth of data on broadband, have found it difficult to find complete and coherent information on ISPs' plans.¹¹ As OTI has noted, even when the information is available, in many instances both basic and critical information about a given service offering is buried in various footnotes, subpages or terms of service.¹²

Although consumers could conceivably do the legwork themselves to understand different ISPs disclosures and distill them all into a uniform set of common data points, they are extremely unlikely to do so. According to scholars studying consumer decision-making, consumers tend to use only the information that is explicitly provided, in the form that it is offered.¹³ This suggests that individual consumers will not parse through fine-print terms on ISPs' websites and otherwise conduct additional research to understand and compare non-uniform disclosures.

This is why scholars of consumer decision-making have supported label-like disclosures. For example, some have argued that it is “better to provide consumers with information in ‘chunked’ form, rather than in individual components, as consumers will often ignore information that requires some transformations.”¹⁴ Others have explained that “[s]tudies suggest that standardized displays provide the largest benefits to consumers,” and argued that “revelation of key product characteristics in a uniform format facilitates consumer choice.”¹⁵

The Standardized Format Should Err on the Side of Providing Consumers with More, Rather than Less, Information

To best serve consumers, the standardized disclosure format should include detailed information about broadband service packages. Studies show that consumers have a clear preference for more information, rather than less. In addition, detailed information would ensure maximum utility not only for individual consumers, but also for researchers and information intermediaries who provide a vital service to consumers. To address concerns about the cognitive limits of consumers' ability to consider numerous details at one time during the decision-making process, the standardized disclosure format should use a clear visual hierarchy to prioritize data points in accordance with their relative importance to the average consumer.

Consumers express a clear preference for detailed information about products and services under consideration. For example, scholars writing about the impact of different information disclosure policies on consumers choosing an electricity supplier reported, “[w]hen questioned directly about their satisfaction with the amount of information they had to make an informed decision, subjects prefer a policy in which all products disclose all attributes.”¹⁶ In one survey that explored consumers' attitudes toward nutrition labels, 90 percent of consumers surveyed indicated that they use the label to make purchasing decisions, even though individual consumers did not understand every piece of information conveyed through the label.¹⁷ In another survey, patients considering a drug were given a choice between a relatively brief package insert and a brochure containing a fuller discussion of risks and benefits, and patients were found to prefer the brochure to the insert.¹⁸

Not only would detailed information about service offerings honor consumers' preferences for more detailed disclosures, but it would also ensure that standardized disclosures are of maximum utility for researchers and information intermediaries. This benefits consumers, because researchers and information intermediaries are best thought of not as wholly separate from individual consumers, but rather as providers of a valuable service for consumers during the decision-making process.¹⁹ Indeed, research indicates that consumers are likely to consult intermediaries for assistance in the decision-making process.²⁰

The Updated Broadband Truth-in-Labeling Standardized Disclosure Format Proposal

The Open Technology Institute proposes the following updated “Broadband Truth-in-Labeling” standardized disclosure. As shown on the next page, the label provides a template for standardized, clear, and meaningful disclosures that will enable consumers to more easily compare products, which will in turn advance competition in the broadband market. This version of the proposal is designed for use on the website of a fixed broadband provider.²¹

Label Presentation and Format

The updated Broadband Truth-in-Labeling proposal is designed to foreground the key pieces of information that are essential to most consumers, while also providing additional details that a significant minority of consumers consider important. This is necessary because consumers have limited capacity to process information.²² In the three-column format, the leftmost column describes each category of information, the center column contains a bolded summary of key information in that category, and the right-hand column provides a more granular breakdown of details. The pieces of information included in the proposed label are consistent with FCC transparency regulations.²³

In accordance with FCC regulations, the Broadband Truth-in-Labeling proposal is designed to be displayed “on a publicly available website” and “at the point of sale.”²⁴ As mentioned above, this particular version of the proposal is designed for website use. OTI recommends that each fixed broadband provider post the standardized disclosure format two places on its website: via a hyperlink posted in a prominent location on the ISP’s website (the “publicly available website” location), and again in the marketing section of the website as the consumer is considering a particular package (the “point of sale” location).²⁵ To be in compliance with the requirement that disclosures be made “publicly available” OTI urges the FCC to specify that ISPs must make their disclosures available without requiring consumers to provide specific location information or certify that they live in the particular location where a service package is available. At the point of sale, disclosures should be made available to the consumer in a clear and conspicuous

way so that consumers will notice and make use of it.²⁶ This In ever location, disclosures must be presented in a way that is accessible to individuals with disabilities.²⁷

To maximize utility for government, researchers, and information intermediaries, OTI recommends that the standardized disclosure format be made in a machine-readable format: JSON, XML, or CSV. These formats align with the White House’s own Open Data policies for releasing Federal data in ways that are “open, discoverable, and usable” by the public.²⁸

ExampleCom Ultra 25/10

Electronically Generated: July 16, 2015

Compliant with FCC [Broadband Disclosure Standards](#)

PRICING

Monthly recurring fee	\$40 per month during promotion \$60 per month after promotion	Promotion, valid for first 12 months	-\$20
		Plan Price	\$50
		Taxes	\$10
One-time required fees	\$70 Total	Installation	\$50
		Activation	\$20
Conditional Fees	Varies	Early termination fee (Cancellation in first year)	\$150
		Router purchase	\$90

PERFORMANCE

Speed	Average speed during peak hours 15 Mbps download 7 Mbps upload	Average speed over 24h period (upload/download)	26/8
		Percentage of time at or above average speed	71%
		Average latency	3 ms
		Average latency, peak hours	5 ms
		Average packet loss	0.4%
		Average packet loss, peak hours	1%

TERMS OF AGREEMENT

Contract	2 years	Early termination fee (Cancellation in first year)	\$150
		Monthly recurring fee guaranteed for term of contract	
Privacy Practices	FCC Rules on Broadband Privacy Company Privacy Policy		
Network Management	Company Network Management Practices		
Complaints Processing	Company Complaint Form		
	FCC Complaint Portal		

Label Content

The top portion of the Broadband Truth-in-Labeling proposal contains the name of the service package, the date the disclosure form was generated, and a link to a page that should be created on the FCC's website that explains what the standardized disclosure format is and what constitutes compliance with the format, and that includes a glossary of terms that may be found in the disclosure.

The *2015 Open Internet Order* divides information that must be disclosed under transparency regulations into three categories: Commercial Terms,²⁹ Performance Characteristics,³⁰ and Network Practices.³¹ OTI's recommendation divides the information slightly differently, into sections titled Pricing, Performance, and Terms of Agreement.

Pricing

The most important information about pricing communicates to the consumer the full monthly recurring fee (including taxes and additional fees), the total one-time required fees to get connected, and any conditional fees the consumer might not anticipate but could incur depending on behavior. Therefore the Broadband Truth-in-Labeling proposal foregrounds the answers to these three questions in the center column under the Pricing heading. Consistent with the *2015 Open Internet Order* and to deliver clarity and greater granularity to the pricing information for consumers wishing to know just how the fees break down, the proposal recommends additional data points for inclusion in the right-hand column of the label:³²

- Any promotional discount, including the term of that discount
- Total monthly plan price
- Total monthly taxes
- One-time installation fee
- Activation fee
- Conditional early termination fee
- Conditional router purchase

By making detailed pricing data readily available, and distinguishing between monthly recurring fees, one-time fees, and conditional fees, consumers can calculate and compare the full cost of various services and better understand potential future price increases. Collecting this data is also valuable to researchers, so that they can better understand the competitive forces at play and identify areas of improvement.³³

Performance

To prevent situations in which consumers sign up expecting the advertised speed, only to later learn that the advertised speed is virtually never realized because it represents the maximum under ideal conditions, consumers need to know how the network actually performs. OTI recommends visually prioritizing a reasonable baseline for consumer expectations: the average speed during peak hours.³⁴

At the same time, consumers should have access to more detailed information about actual performance, which many consumers will find useful to inform assessments of whether considered service packages are suitable for specific intended uses, such as gaming or high-definition video streaming. Therefore the proposal recommends the following performance-related data points for inclusion in the right-hand column of the label:³⁵

- Average speed over 24-hour period
- Percentage of time at or above average speed³⁶
- Average latency
- Average latency during peak hours
- Average packet loss
- Average packet loss during peak hours

Terms of Agreement

The Terms of Agreement section of the Broadband Truth-in-Labeling proposal helps consumers understand what else they are agreeing to when they sign up for a particular service package. The proposal foregrounds either the fact that this is a no-contract service package, or in the event of a contract term, the length of the contract.³⁷

It also offers two data points to be included in the right-hand column associated with information about the contract:

- Early termination fee³⁸
- The consumer's consideration for the contract (in the sample case, that the monthly recurring fee will be guaranteed for the term of the contract).

The Broadband Truth-in-Labeling proposal also includes other terms of service in this section of the label: the privacy policy, network management practices, and redress options.³⁹ However, because these terms are not easily distilled into small data points that can be included in a uniform manner on a label, OTI recommends that ISPs summarize policies in separate locations (or in some cases on the same page, below the label), and include hyperlinks to those policies from the label. OTI also recommends the inclusion of links to the FCC's rules on broadband privacy (at such time as they are established), to the ISP's consumer complaint form, and to the FCC Complaint Portal.

Conclusion

The establishment of a safe harbor under the transparency provisions of the FCC's Open Internet regulations is an important starting point for improving broadband disclosures to better facilitate consumer choice in the marketplace. OTI hopes the Broadband Truth-in-Labeling proposal detailed in this report will serve as an informative resource as the FCC and Consumer Advisory Committee move toward defining the contours of the safe harbor in greater detail. Furthermore, OTI hopes that the proposed form will ultimately work to empower consumers shopping for Internet service in the U.S. and, perhaps in turn, spur more competition in the home Internet market.

Endnotes

1. American Customer Satisfaction Index, ACSI Telecommunications and Information Report 2015 at 6 (June 2, 2015), <https://www.theacsi.org/news-and-resources/customer-satisfaction-reports/reports-2015/acsi-telecommunications-and-information-report-2015/acsi-telecommunications-and-information-report-2015-download>.
2. *Protecting and Promoting the Open Internet*, GN Docket No. 14-28, Report & Order (rel. Mar. 12, 2015), FCC 15-24, ¶ 163 [hereinafter *2015 Open Internet Order*].
3. Benjamin Lennett, et al., New America Foundation, *Broadband Truth-in-Labeling* (2009), <http://www.newamerica.org/oti/broadband-truth-in-labeling/> [hereinafter 2009 Broadband Truth-in-Labeling Report].
4. *2015 Open Internet Order* at ¶ 179; see 2009 Broadband Truth-in-Labeling Report; Open Internet Advisory Committee, Transparency Working Group, *Open Internet Label Study* (Aug. 20, 2013), <https://transition.fcc.gov/cgb/oiac/Transparency-Label-Study.pdf>.
5. *2015 Open Internet Order* ¶¶ 179–180.
6. See Danielle Kehl, Nick Russo, Robert Morgus, & Sarah Morris, *The Cost of Connectivity 2014: Data and Analysis on Broadband Offerings in 24 Cities Across the World* (2014), <https://www.newamerica.org/oti/the-cost-of-connectivity-2014/>.
7. Stacey Higginbotham, *BAM! The FCC just defined broadband as 25 Mbps down and 3 Mbps up*, Gigaom, Jan. 29, 2015, <https://gigaom.com/2015/01/29/bam-the-fcc-just-defined-broadband-as-25-mbps-down-and-4-mbps-up/>.
8. Danielle Kehl, Hibah Hussain, Nick Russo, & Patrick Lucey, New America’s Open Technology Institute, *Reining in the Cost of Connectivity* (Jan. 15, 2014), <https://www.newamerica.org/oti/reining-in-the-cost-of-connectivity/>.
9. The GAO’s 2015 “Broadband Performance” report found that, despite the FCC’s transparency rule requiring ISPs to disclose Broadband performance information, “ISPs’ disclosures vary, and some stakeholders said that the lack of standardization of disclosure can make it difficult for consumers to compare broadband services.”
10. Similar reports that have been conducted on ISPs’ services include: Akamai’s *State of the Internet*, International Telecommunication Union’s *The State of Broadband*, Federal Communications Commission’s *Measuring Broadband America* Report, The American Enterprise Institute’s *The European Union’s Broadband Challenge* (2014), University of Pennsylvania Law School’s Center for Technology, Innovation and Competition’s *U.S. vs. European Broadband Deployment: What Do the Data Say?* (2014), Progressive Policy Institute’s *The State of U.S. Broadband: Is It Competitive? Are We Falling Behind?* (2014), Copenhagen Economics’ *Europe Can Catch Up With the US: A Contrast of Two Contrary Broadband Models* (2013) *Id.*
11. *Id.*
12. *Id.*
13. David Weil, Archon Fung, Mary Graham & Elena Fagotto, *The Effectiveness of Regulatory Disclosure Policies*, 25 J. Pol’y Analysis Mgmt. 155, 158 (concluding that embeddedness of information is vital because “information users acting rationally to advance their various, usually self-interested, ends may not seek out all of the information necessary to make optimal decisions”).
14. Michael B. Mazis & Richard Staelin, *Using Information-Processing Principles in Public Policymaking*, 1 J. Marketing & Pub. Pol’y 3, 9 (1982).
15. Brian Roe, Mario F. Teisl, Huaping Rong, & Alan S. Levy, *Characteristics of Consumer-Preferred Labeling Policies: Experimental Evidence from Price and Environmental Disclosure for Regulated Electricity Services*, 35 J. Consumer Aff. 1, at 5, 23 (2001).
16. *Id.*
17. Patricia A. Daly, *The Response of Consumers to Nutrition Labeling*, 10 J. Consumer Aff. 170, 174 (1976).
18. Mazis & Staelin, *supra* note 15, at 4.
19. Ctrl-Shift, Consumer Futures, *The Rise of the Consumer Empowering Intermediary: A Special Report on a Catalyst of Market Change by Ctrl-Shift 3* (2014) (“These intermediaries help consumers by balancing asymmetries of information and power and reducing the pain of engaging with suppliers.”).

<http://www.consumerfutures.org.uk/files/2014/01/The-Rise-of-the-Consumer-Empowering-Intermediary-Ctrl-Shift.pdf>.

20. Archon Fung, Mary Graham, & David Weil, Full Disclosure: The Perils and Promise of Transparency 65 (2008) (“users often rely on intermediaries (brokers, analysts, fund managers, and Web-based programs) to aid embedding information in their investment choices”).

21. Although OTI also anticipates the development of additional standardized disclosure formats for mobile broadband providers and for point-of-sale disclosures in storefronts and over the phone, this particular proposal would need to be modified for each of those contexts.

22. See, e.g., James R. Bettman, John W. Payne, & Richard Staelin, *Cognitive Considerations in Designing Effective Labels for Presenting Risk Information*, J. Pub. Pol’y & Marketing (vol. 5) (1986), at 9 (“[O]nly a few items of information can be considered at any one time. How few? The standard answer to this question is seven items of information, plus or minus two, although some researchers have recently suggested that roughly four to five items is a more accurate estimate.” (internal citations omitted)).

23. See 2015 *Open Internet Order*.

24. *Id.* at ¶ 171 (“The existing transparency rule requires, at a minimum, the prominent display of disclosures on a publicly available website and disclosure of relevant information at the point of sale.”).

25. OTI further recommends that the FCC specify uniform text for the hyperlink on the ISP’s homepage, so that consumers browsing the sites of different providers can easily locate the comparable disclosures.

26. Mazis & Staelin, *supra* note 15, at 5 (Because consumers are confronted with so much data, they “have neither the time nor the inclination to attend to all of the messages being disseminated.” For this reason, providers must attract consumers’ attention to their messages. At this “attention stage,” where consumers are examining products, stimuli like “an advertisement, a warning or nutritional label,” can attract the consumer’s attention.).

27. 2015 *Open Internet Order* at ¶ 180.

28. Project Open Data, *Open Data Policy — Managing*

Information as an Asset, <https://project-open-data.cio.gov/> (last visited Jul. 23, 2015).

29. 2015 *Open Internet Order* at ¶ 164.

30. *Id.* at ¶ 165.

31. *Id.* at ¶ 169.

32. See *id.* at ¶ 164 (detailing these items under description of what information should be disclosed about price and other fees, and stating, “we now require that this information always be disclosed.”).

33. *Reining the Cost of Connectivity* (2013) pg. 5.

34. See *id.* at ¶ 166 (“We also expect that network performance will be measured in terms of average performance over a reasonable period of time and during times of peak usage.”).

35. See *id.* at ¶ 166 (detailing these items under description of what information should be disclosed actual network performance).

36. This particular data point is not named in the 2015 *Open Internet Order*, but OTI recommends that it be included in the standardized format to help consumers understand how much variation there is in actual network performance, and what percentage of the time the actual performance falls below the advertised average.

37. In this example it says “2 years.” In the event there is no contract, the field would still exist and would merely say “no contract.”

38. OTI recommends that this item appear twice in the label: both here and in the Pricing section.

39. 2015 *Open Internet Order* at ¶ 164.