BROADBAND INTERNET SERVICE DISCLOSURES

Updated June 6, 2016

Consistent with FCC regulations[1], Hiawatha Broadband Communications, Inc. ("HBC") provides this information about our broadband Internet access services. We welcome questions or comments about this information. You may contact us at **support@hbci.com** or **(888) 474-9995**.

Network Practices

General description. We provide a variety of broadband Internet access service offerings to our residential and business customers. We provide the services over our broadband network and through third-party fiber optic lines connecting to the Internet. We also contract with one or more companies for certain network monitoring and management services. We monitor our network and traffic patterns and make changes we deem necessary to manage and improve overall network performance. We use reasonable, nondiscriminatory, network management practices to improve overall network performance to ensure a high-quality online experience for all users. Our network management practices do not target any specific content, application, service, or device. As network management issues arise and as technology develops, we may employ additional or new network management practices. We will update these disclosures as necessary.

Related documents and disclosures. Use of our Internet service is also governed by:

• HBC Internet Acceptable Use Policy, available at **www.hbci.com/about-us/policies**
• HBC Cable Privacy Statement, available at **www.hbci.com/about-us/policies**

Congestion Management Practices used

Congestion Management. We describe in this section network management practices used to address congestion on our network.

Network monitoring. We monitor our network for utilization trends. We monitor network traffic and congestion on a daily basis. We use this information to plan increases in bandwidth available, port additions, or additional connectivity to the Internet. We place no limitations on data usage.

Types of traffic affected. Our congestion management practices do not target any specific content, application, service, or device.

Purposes of congestion management practices. Our Internet network is a shared network. This means that our customers share upstream and downstream bandwidth. The goal of our congestion management practices is to enable better network availability and speeds for all users. Our congestion management practices serve to:

• Help us adapt and upgrade our network to maintain or improve network performance as demand for our Internet service increases.
• Help us adapt and upgrade our network to maintain or improve network performance as demand for higher bandwidth applications increases. Some examples of higher bandwidth applications are gaming, streaming movies, and streaming high definition video.
• Help us identify potential bandwidth abusers.

Congestion management criteria. Our network monitoring provides data to help us plan upgrades to our network, equipment, technology, and connectivity to the Internet. As demand for our Internet service increases, and as demand for higher bandwidth applications increases, we monitor effects on network performance and plan upgrades as we deem necessary to meet advertised speeds.

Effects on end user experience. Because our Internet service network is a shared network, periods of high network demand may result in Internet traffic congestion. Our network monitoring practices are continually conducted and adjustments made accordingly to provide end users with the best possible experience

Typical frequency of congestion. Congestion tends to occur during periods of peak demand for higher bandwidth applications, however, because of continual network monitoring, we are able to make adjustments to ensure that customers are not adversely affected during peak periods. Generally, the frequency of congestion tends to increase from 7 pm – 11 pm, especially on Friday and Saturday nights as well as holidays.

Application-Specific Practices. We do not manage congestion by restricting or managing any specific protocol ports, fields, or applications.

Device Attachment Rules. This section addresses any limitations on attaching lawful devices to our network.

Cable Modem Internet Service. Our cable modem Internet service requires connection of a cable modem to our network along with the use of

Broadband Internet Service Disclosures, Continued

residential gateway device. You can obtain a cable modem from us or you may purchase one from most retail electronics sellers. Only devices that have been fully certified by Cable Labs as compliant with the or DOCSIS 3.0 specifications may be used.

Fiber-to-the-Home Internet Service. Our fiber-to-the-home service requires connection of a residential gateway device and Optical Network Terminal (ONT) to our network. We provide and install the ONT, and you can obtain a residential gateway device from us or you may purchase one from most retail electronics sellers..

Terrestrial Fixed Wireless Service. Our terrestrial fixed wireless service requires connection of a residential gateway device to a directional radio antenna that receives a signal from our tower. We install the directional antenna, and you can obtain the directional radio antenna and residential gateway device from us, or you may purchase the residential gateway device one from most retail electronics sellers.

Network and End User Security. This section provides a general description of the practices we use to maintain security of our network and end users, including triggering conditions.

Practices used to ensure network and end-user security, including triggering conditions. In general, we promptly address any event originated by a customer or customer equipment that negatively affects others' use of the network. Our practice is to first contact the customer causing the problem, and if we received no response, we terminate that customer's service until the problem is corrected.

Practices used to Ensure Network Security, Including Triggering Conditions Hostile port blocking. We do not block ports, unless our network comes under attack from viruses or other "malware." In such cases, we block that specific port until the attack ceases, at which time we remove the block. In all other instances we allow the customers to manage their own connections to the Internet without interference due to port blocking by us.

Virus and Spam filtering. We filter all outbound email traffic for viruses and spam. Our inbound virus and spam filtering is performed by a third-party provider. Our contractor performs industry standard virus scanning and prevention techniques on our email platform for mail inbound from the public network. Should an email message be found to contain a virus or other harmful content, the message will be deleted without notification given either to the sender or the intended recipient(s).

Misuse of System Resources. To protect and maintain high availability of all its servers, activities designed to cause harm to or monopolize the resources of any server in our network are strictly prohibited.

Practices used to ensure end-user security, including triggering conditions.
Hostile port blocking. We do not block ports unless our network comes under attack from viruses or other "malware." We allow customers to manage their own connections to the Internet without interference due to port blocking by us.

Virus and Spam filtering. We offer customers antivirus software and spam filtering services.

Performance Characteristics
General Service Description. Our cable modem Internet service product includes wiring, a cable modem and a residential gateway device. Our fiber-to-the-home Internet service product includes wiring, an Optical Network Terminal (ONT) and a residential gateway device. Our fixed terrestrial wireless Internet service product includes wiring, a directional radio antenna, and residential gateway device. Through our Internet service products, we serve as a local Internet service provider. Our Internet service products enable residential and commercial subscribers to access all lawful content, applications, and services of their choice available on the Internet.

Cable modem Internet service technology. We deliver our cable modem Internet service over our hybrid fiber-coaxial network using the Data Over Cable Service Interface Specification (DOCSIS). Customers access our network using cable modems and a residential gateway. To connect from our network to the Internet, we use equipment called a Cable Modem Termination System (CMTS) that acts as a gateway to the Internet for our customers' cable modems. This is a shared network, which means that our customers share upstream and downstream bandwidth.

Fiber-to-the-Home Internet service technology. We deliver our fiber-to-the-home service over our fiber optical network. Customers access our network using a residential gateway device. To connect from our network to the Internet, we use equipment called an Optical Network Terminal (ONT) and a residential gateway device that acts as a gateway to the Internet for our customers' personal computer or routers. This is a shared network, which means that our customers share upstream and downstream bandwidth.

Terrestrial Fixed Wireless Internet service technology. We deliver our fixed terrestrial wireless Internet service over our network. Customers access our network using a directional antenna, typically mounted on the roof, and a residential gateway device. We use a high-capacity T-carrier

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to broadcast the signal from a tower, and the directional radio antenna mounted on the roof of our customers' home or office receives the signal from the tower. To connect from our network to the Internet, we connect the directional radio antenna to a residential gateway device that acts as a gateway to the Internet for our customers' personal computer or routers. This is a shared network, which means that our customers share upstream and downstream bandwidth.

Expected and Actual Speeds and Latency. We offer customers a variety of Internet service levels. We provide a description of the expected maximum transfer speeds associated with each service level in Rate Guides, available at **www.hbci.com/resources**. We provision all Internet service levels approximately 200 kbps greater than each level of service to ensure customers generally experience transfer speeds corresponding to the level of service to which they subscribe. We test our network routinely to address any issues concerning network congestion. Our goal is to provide the customer with the speeds they have subscribed to.

Speed. TThe speeds we identify for each Internet access service level are the maximum upload and download speeds that customers are likely to experience. We provision our customers' modems and engineer our network to deliver the speeds to which our customers subscribe. However, we do not guarantee that a customer will actually achieve those speeds at all times. A variety of factors can affect upload and download speeds, including customer equipment, network equipment, congestion in our network, congestion beyond our network, performance issues with an Internet application, content, or service, and more.

Latency. Latency is another measurement of Internet performance. Latency is the time delay in transmitting or receiving packets on a network. Latency is primarily a function of the distance between two points of transmission, but also can be affected by the quality of the network or networks used in transmission. Latency is typically measured in milliseconds, and generally has no significant impact on typical everyday Internet usage. As latency varies based on any number of factors, most importantly the distance between a customer's computer and the ultimate Internet destination (as well as the number and variety of networks your packets cross), it is not possible to provide customers with a single figure that will define latency as part of a user experience.

Actual speed and latency performance. Actual speed and latency performance for our cable modem Internet service, fiber-to-the-home, and terrestrial fixed wireless Internet service follows.

Cable modem service. Actual speed and latency may vary depending upon network conditions and other factors. Actual performance of our Internet access service in most cases will conform to national wireline broadband Internet speed and latency levels reported by the FCC.[2] The FCC has reported that customers of coaxial cable-based broadband Internet services receive mean download speeds that are within 93% of advertised speeds during non-peak hours, and 85.7% of advertised speeds during peak hours.[3] In addition, the FCC has reported that these same customers experience average latency[4] delays of 28 milliseconds, increasing by an average of 30 milliseconds during peak hours. Our data indicates our cable modem service latency ranges from 4 to 8 milliseconds.

Fiber-to-the-Home service. The FCC has reported that customers of fiber-to-thehome based broadband Internet services receive mean download speeds that are within 114% of advertised speeds during non-peak hours, and 113.5% of advertised speeds during peak hours.[5] In addition, the FCC has reported that these same customers experience average latency[6] delays of 17 milliseconds, increasing by an average of 18 milliseconds during peak hours. Our data indicates our fiber-to-the-home service latency ranges from 1to 3 milliseconds.

Terrestrial Fixed Wireless service. HBC fixed wireless-based broadband Internet services receive mean download speeds that are within 95% of advertised speeds during non-peak hours, and 93% of advertised speeds during peak hours. Our data indicates our terrestrial fixed wireless service latency ranges from 1to 9 milliseconds.

Customer Speed Test. We provide a customer speed test for our customers, available at **www.hbci.com**. Should a customer experience a problem, we will dispatch a service technician within a 24-hour period.

Suitability of the Service for Real-time Applications. Each of our Internet services are suitable for typical real-time applications including messaging, voice applications, video chat applications, gaming, and Internet video. If users or developers have questions about particular real-time applications, please contact us at **info@hbci.com** or **(507) 474-4000**.

Commercial Terms
Prices. Monthly prices for our Internet access service are available at **www.hbci.com/resources**.

Privacy Policies. From time to time, we may need to disclose anonymized network traffic information to third parties solely for purposes of providing and maintaining our Internet service product or if required by law. We reserve the right to do so.

Broadband Internet Service Disclosures, Continued

For further information on our privacy policies, see our Internet Acceptable Use Policy and Cable Subscriber Privacy located at **www.hbci.com/about-us/policies**.

Illegal or Indecent Content. Use of any HBC service to make any illegal, indecent or obscene content available via transmission, storage, or display of such material is prohibited. Accounts maintaining such content are subject to suspension or termination without notice.

Inspection of network traffic. We routinely monitor network and traffic patterns.

Virus and Spam filtering. We filter all outbound email traffic for viruses and spam. Inbound email traffic filtering is a subscription based service provided by a third party provider. We make available to customers a filtering service, at their option, that is all inclusive for website protection.

Storage of network traffic information. Dynamic Host Configuration Protocol (DHCP) information is a code included in all network traffic that associates that traffic with a particular cable modem or customer equipment sending or receiving the traffic. We store DHCP information for at least 6 months.

Provision of network traffic information to third parties. We may disclose network traffic information to third parties solely for purposes of providing and maintaining our Internet service product or if required by law.

Use of network traffic information for non-network management purposes. Not applicable.

Redress Options; end-user complains and questions. End users or edge providers with complaints or questions relating to these disclosures should contact our Network Operations Manager or use our website customer care link, available at **www.hbci.com/contact**, to submit complaints or questions. We will endeavor to answer questions promptly via email or voice. For complaints, we will provide an initial response in writing within 15 business days of receipt. We will attempt to resolve complaints informally, escalating the matter to senior management if needed.

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[1] 47 CFR 8.3 and In re: Preserving the Open Internet, Broadband Industry Practices, Report and Order, 22 FCC Rcd 17905 (2010). [2] See FCC's Office of Engineering and Technology and Consumer Affairs Bureau, Measuring Broadband, A Report on Consumer Wireline Broadband Performance in the U.S., OET CGB DOC-308828A1, pp. 4-6 (Aug. 2, 2011) (available at: **http://transition.fcc.gov/cgb/measuringbroadbandreport/Measuring_U.S._-_Main_Report_Full.pdf**). [3] TThe FCC has defined peak hours measured during "busy hour" as weeknights between 7:00 pm and 11:00 pm local time. [4] The FCC has defined latency is the total length of time it takes a signal to travel from an origination point to the nearest server, plus the time for an acknowledgement of receipt to travel back to the origination point. The nearest server is the server providing the minimum round trip time. [5] The FCC has defined peak hours measured during "busy hour" as weeknights between 7:00 pm and 11:00 pm local time. [6] The FCC has defined latency is the total length of time it takes a signal to travel from an origination point to the nearest server, plus the time for an acknowledgement of receipt to travel back to the origination point. The nearest server is the server providing the minimum round trip time.