

# NH BROADBAND, LLC Internet Transparency Policy (Network Practices)

Consistent with the Federal Communications Commission's Open Internet Rules found in Part 8 of Title 47 of the Code of Federal Regulations, NH BROADBAND, LLC ("NH BROADBAND") provides this information about our fiber broadband high-speed Internet access services. All Internet service providers are required to publicly disclose information about their network management practices, performance characteristics, and terms of service. This information is provided so that our current customers, prospective customers, third-party content providers and other interested parties can make informed choices regarding their broadband Internet services.

We welcome questions or comments about this information. You may contact us at:

NH BROADBAND, LLC PO Box 681389 Riverside, MO 64168

24/7 Customer Support (866) 431-1928

Email: questions@nhbroadband.com

# Network Practices

General description

NH BROADBAND provides a variety of fiber broadband high-speed Internet service offerings to our residential and business customers. We provide service over our broadband network and through third parties' 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 throttle, target or block any lawful 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 fiber broadband high-speed Internet service is also governed by:

Broadband Service Order and Agreement

- Acceptable Use Policy
- Privacy Policy

These documents are available for review at www.sandwich.nhbroadband.com

## **Congestion Management**

NH BROADBAND uses various tools and techniques to manage and monitor its network, deliver its service and ensure compliance with the Acceptable Use Policy. Without effective network management, customers would be subject to the negative effects of spam, viruses, security attacks, network congestion, and other risks or degradations of the service.

NH BROADBAND uses quality of service (QoS) to separate data types and may prioritize them at different levels. For example, voice calls may be prioritized over general Internet traffic. Our congestion management practices potentially affect all network traffic, but do not target any specific content, application, service or device.

## **Prioritization**

NH BROADBAND does not prioritize any traffic to benefit any party or affiliate, in exchange for consideration, monetary or otherwise.

## **Application-Specific Practices**

NH BROADBAND uses industry standard tools and generally accepted best practices and policies to help meet its customer commitment. To protect the security of our network and its customers, we may identify and block known hostile ports.

# **Device Attachment Rules**

NH BROADBAND places no general restrictions on lawful devices that a customer may connect to our network, so long as the device is: (i) compatible with our network; and (ii) does not harm our network or other users. Our fiber broadband Internet service works with most types of PCs and laptops, including Macs, and other Internet-compatible devices like game systems and Internet-enabled TV's. If a wireless router is connected to the service, wireless Internet compatible devices including computers, tablets, smartphones and other devices can connect to our network. If a customer or potential customer believes that they have an unusual configuration, contact us and we will help determine if there is a compatibility issue.

# Fiber-To-The-Home (FTTH) equipment

We install Optical Network Terminals (ONTs) at the customer's premises to enable use of our broadband high-speed Internet service delivered via our FTTH network.

#### Network and End User Security

The following provides a general description of the practices we use to maintain the security of our network.

<u>Hostile port blocking</u>: We may identify and block known hostile ports to prevent unwanted files, browser hacking and virus attacks.

<u>Hostile IP blocking:</u> We may identify, and block known hostile IP addresses to prevent DDoS (Distributed Denial of Service) attacks, infrastructure hacking attempts, and malicious attacks on customers.

<u>Virus and spam filtering</u>: Network management activities may include identifying spam, detecting malicious Internet traffic and preventing the distribution of viruses or other harmful code or content.

Other tools and techniques may be implemented to meet our goal of delivering the best possible broadband Internet experiences to all of our customers.

#### Data usage

NH BROADBAND has not established a monthly data usage cap for its customers. We do however monitor usage. We regularly review accounts with uncommonly high usage relative to all other accounts to ensure such accounts have not been subjected to cloning, unauthorized access, other security breaches, or unlawful activity. As part of our review, we may contact account holders to inquire about usage and may take or require actions to correct problems such as security, class of use or unlawful activity.

#### **Performance Characteristics**

High-speed broadband Internet Service is provided via fiber connections. ONT's are installed at the customer premise and we utilize G-PON FTTH technologies to deliver service to the end user. NH BROADBAND provisions its ONTs and engineers its network to maximize customers' ability to receive the maximum speed levels for each tier of service. NH BROADBAND does not however guarantee that a customer will achieve those speeds at all times. NH BROADBAND advertises its speeds as "up to" a specific level based on the tier of service to which the customer subscribes. The actual speed a customer experiences may vary based on a number of factors and conditions.

- Performance of a customer's Internet connected device, including its age, memory, processing capability, operating system, and the number of applications simultaneously running, and the presence of any malware or viruses.
- Type of connection between a customer's computer and ONT. For example, wireless connections may be slower than direct connections into a router or ONT. Wireless connections also may be subject to greater fluctuations, interference and congestion.
- The distance packets travel (round trip time of packets) between a customer's computer and its final destination on the Internet, including the number and quality of the networks of various operators in the transmission path. The Internet is a "network of networks". A customer's connection may traverse the networks of multiple providers before reaching its destination, and the limitations of those networks will most likely affect the overall speed of that Internet connection.
- Congestion or high usage levels at the website or destination. If a large number of visitors are accessing a site or particular destination at the same time, your connection will be affected if the site or destination does not have sufficient capacity to serve all of the visitors efficiently.
- Gating of speeds or access by the website or destination. In order to control traffic or performance, many websites limit the speeds at which a visitor can download from their site. Those limitations will carry through to a customer's connection.

• The performance of a subscriber owned router installed. Equipment performance may degrade over time, and certain devices are not capable of handling higher speeds.

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.

Broadband labels for each NH Broadband service package can be accessed via the following link: <u>https://nhbroadband.com/broadband-labels</u>. These broadband labels provide pricing information for each service package as well as typical performance metrics including speed and latency.

## **Commercial Terms**

Additional Information regarding NH Broadband's Terms of Service is available online at <u>www.nhbroadband.com</u>.

## **Customer Information Privacy and Security**

NH BROADBAND maintains the privacy and security of all customer network traffic in accordance with the NH BROADBAND Privacy Policy available online at <u>www.nhbroadband.com</u>.

# Additional Information

Please contact NH BROADBAND by phone at (866)431-1928 or via email at questions@nhbroadband.com to discuss any issues or concerns. If any information found within our policies and agreements are inconsistent with this network management disclosure, this disclosure controls.