

# NEW HOPE TELEPHONE COOPERATIVE

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## BROADBAND INTERNET SERVICE DISCLOSURES

FCC regulations<sup>1</sup> require persons providing broadband Internet services to publicly disclose various pieces of information. New Hope Telephone Cooperative provides this information about our broadband Internet access services with this document. We refer to our broadband Internet access services as “High Speed”, “High Speed DSL” and/or “High Speed Internet”. The technology we use to provide “High Speed” is Digital Subscriber Line (DSL). We welcome questions or comments about this information. You may contact Internet Technical Support at (866) 620-7381.

## NETWORK PRACTICES

### General Description

We provide a variety of Internet offerings to our residential and business customers. We provide the service over our broadband network and through third party fiber optic lines connecting to the Internet. We also contract outside our company 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 is also governed by:

- New Hope Telephone Cooperative Internet Acceptable Use Policy, available at:
  - [http://www.newhopetel.net/Files/NHTC\\_Internet\\_Acceptable\\_Use\\_Policy.pdf](http://www.newhopetel.net/Files/NHTC_Internet_Acceptable_Use_Policy.pdf)
  - New Hope Telephone Cooperative Business Office, 555 Battlefield Rd., Fort Defiance, VA 24437
- New Hope Telephone Cooperative Internet Rules and Regulations, available at:
  - [http://www.newhopetel.net/Files/NHTC\\_Internet\\_Rules\\_and\\_Regulations.pdf](http://www.newhopetel.net/Files/NHTC_Internet_Rules_and_Regulations.pdf)
  - New Hope Telephone Cooperative Business Office, 555 Battlefield Rd., Fort Defiance, VA 24437

## Congestion Management Practices Used

### *Network Monitoring*

We regularly review traffic statistics showing changes in network traffic and congestion. We use this information to plan increases in bandwidth, port additions, or additional connectivity to the Internet.

### *Types of traffic affected*

Our congestions management practices do not target any specific content, application, service or device.

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<sup>1</sup> Code of Federal Regulations, Title 47, Part 8 – Preserving the Open Internet, §8.3 – Transparency

### ***Purposes of Congestion Management Practices***

Our High Speed Internet network is a shared network. This means that our customers share upstream and downstream bandwidth at some level. 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 High Speed Internet 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.

## **Congestion Management Criteria**

### ***Network Monitoring***

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. We have not established specific criteria to govern our upgrade decisions.

### ***Effects on End User Experience***

Because our broadband Internet network is a shared network, periods of high network demand may result in Internet traffic congestion. End users may experience reduced bandwidth or speed during these times.

### ***Typical Frequency of Congestion***

While we strive to reduce all congestion on our network, congestion may increase during periods of peak demand for higher bandwidth applications. These periods of peak demand tend to occur in the evenings.

## **Application-Specific Practices**

This section discloses any application-specific practices we use, if any.

### ***Management of Specific Protocols or Protocol Ports***

We do not block ports unless our network comes under attack from viruses or other “malware.” In such cases, a third party provider may block that specific port until the attack ceases, at which time they remove the block.

### ***Modification of Protocol Fields***

Not applicable.

### ***Applications or Classes of Applications Inhibited or Favored***

Not applicable.

## **Device Attachment Rules**

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

### ***General restrictions on types of devices to connect to network***

We place no general restrictions on lawful devices that a customer may connect to our network, so long as the device is:

- compatible with our network
- does not harm our network or other users

Our High Speed Internet service works with most types of PCs and laptops including Macs, and other Internet compatible devices like game systems and Internet-enabled TVs. If a wireless router is connected to our High Speed Internet service, wireless Internet compatible devices including computers, tablets, smartphones, and other devices can connect to our network. If a customer or potential customer believes they have an unusual configuration, our customer service department will help determine if there is a compatibility problem.

### ***DSL Equipment***

To use our High Speed Internet service delivered via DSL, customers must have a DSL modem. The customer connects a computer or other Internet enabled device to the modem through a Network Interface Card (NIC) for a wired connection. Some DSL modems can also transmit a Wi-Fi signal for connecting wireless devices to our network. For DSL modems that do not transmit a Wi-Fi signal, a customer can attach a wireless router to the DSL modem for connecting wireless devices. New Hope Telephone Cooperative provides DSL modems that customers may purchase to use our service. A customer may use a compatible, commercially available DSL modem; however, support may be limited.

## **Network and End User Security**

This section provides a general description of the practices we use to maintain security of our network.

### ***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.” In such cases, a third party provider may block that specific port until the attack ceases, at which time they remove the block.

#### **Virus and Spam filtering**

Our third party provider may filter email and website traffic for virus activity and Spam using industry standard virus scanning and prevention techniques. Should an email message be found to contain a virus or other harmful content, we may:

- Notify the sender and/or the intended recipient and quarantine the message.
- Delete the email message without notification. We may terminate service for unlawful activity on our network.

#### **Firewalls**

DSL modems obtained from us have firewalls. When customers obtain a DSL modem from us the firewall is disabled. We will enable the firewall at a customer’s request. The firewall provides some protection against persons or programs that attempt to gain access to your computers or other connected devices through the Internet.

### ***Practices Used to Ensure Security of the Network, Including Triggering Conditions***

#### **Hostile port blocking**

Our third party provider may block known hostile ports to prevent unwanted files, browser hacking and virus attacks.

### Virus and Spam filtering

Our third party provider may filter email and website traffic for virus activity and Spam using industry standard virus scanning and prevention techniques. Should an email message be found to contain a virus or other harmful content, we may:

- Notify the sender and/or the intended recipient and quarantine the message.
- Delete the email message without notification. We may terminate service for unlawful activity on our network.

## PERFORMANCE CHARACTERISTICS

### General Service Description

Our High Speed Internet service enables a customer to connect an Internet-enabled device through either a wired or wireless connection. Through our High Speed Internet service, we serve as a local Internet service provider. Our High Speed Internet service enables residential and business customers to access all lawful content, applications, and services of their choice available on the Internet.

### Service Technology

We deliver our High Speed Internet service using DSL technology. Our High Speed Internet is delivered over existing copper telephone lines. Customers access our network using DSL modems. Our network is a shared network, which means that our customers share upstream and downstream bandwidth.

### Expected and Actual Speeds and Latency

#### *Expected Performance*

We offer customers a variety of High Speed Internet service levels. A description of the expected maximum transfer speeds associated with each service level is available at <http://www.newhopetel.net/Broadband.aspx>. We overprovision all Internet service levels to ensure customers generally experience the maximum the transfer speeds associated with the level of service they purchase.

#### Speed

The speeds we identify for each High Speed Internet 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 may vary depending upon network conditions and other factors. Actual performance of our High Speed Internet in most cases will conform to national wireline broadband Internet speed and latency levels reported by the FCC<sup>2</sup>. The FCC has reported that customers of DSL-based broadband Internet services receive mean download speeds that are within 82% of advertised speeds during non-peak hours, and 77.5% of advertised speeds during peak hours. In addition, the FCC has reported that these same customers experience average latency delays of 44 milliseconds, increasing by an average of 47 milliseconds during peak hours.

### **Suitability of the Service for Real-time Applications**

Our High Speed Internet service is 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 Internet Technical Support at (866) 620-7381.

### **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 DSL modem sending or receiving the traffic. We do not store DHCP information. Our third party provider may store DHCP information.

### **Provision of Network Traffic Information to Third Parties**

We may disclose network traffic information to third parties solely for purposes of providing and maintain our High Speed Internet service or if required by court order.

### **Use of Network Traffic Information for Non-network Management Purposes**

Not applicable.

### **Redress Options; Practices for Resolving End-user and Edge Provider Complaints and Questions**

End users or edge providers with complaints or questions relating to these disclosures should contact Laurie Hensley at (540) 363-5277.

**Questions.** We will endeavor to answer questions promptly via telephone.

**Complaints.** For written 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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<sup>2</sup> 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](http://transition.fcc.gov/cgb/measuringbroadbandreport/Measuring_U.S._-_Main_Report_Full.pdf)).