NORVADO INTERNET SERVICE DISCLOSURE

Introduction

Norvado's goal is to provide the best-in-class Internet experience to our customers. The following disclosure explains the performance characteristics, commercial terms, and network practices for Broadband Internet Access Services (also referred to as BIAS, Internet Services, or Services) provided by Norvado.

The disclosure may be changed without notice. The information in this disclosure is not a contract between Norvado and its customers or any users of the Services. It is designed to provide you with information to understand our Services, and make informed decisions regarding your choice of Internet Services.

It also does not obligate Norvado to provide or maintain any specific level of service or network configuration, and does not create any rights that are not already available to a customer or user by law or under any agreement with Norvado. The information provided is applicable to Internet Services offered by Norvado to residential and small/medium business customers on a retail, mass-market basis.

A. Performance Characteristics

A1. Service Description for Norvado Internet Services

Norvado's wireline network used to provision the majority of services is commonly referred to as a Fiber-To-The-Home network (FTTH). A FTTH network uses fiber optic cables to connect each subscriber's router/modem to a Central Office. Fiber optic cables in the Central Office then connect to higher level routers, and these routers are in turn connected to Norvado's Internet backbone facilities.

Our Internet technology is based on the Gigabit Passive Optical Network (GPON) access technology, which supports triple-play services, high-bandwidth demands, and long reach over fiber optic cable. This allows Norvado to deliver the gigabit speed Services required to meet and exceed the needs of both residential and business customers.

Norvado offers multiple Residential Internet Service packages providing different maximum download and upload speeds. For example, Norvado offers residential packages with speeds of up to 1 Gbps download and 1 Gbps upload. Choosing the best package for you depends upon a variety of factors. Factors to consider include:

- The types of applications typically used,
- The number of users in the household, and
- The number and type of Internet-accessible devices in the household.

At Norvado, we provision and engineer our network to consistently deliver the Internet speeds that our customers subscribe to. However, it is important to note that many factors beyond Norvado's control can affect the actual speeds customers experience on their devices, including:

- Computer Performance Inhibitors (i.e. hardware age, software and operating system versions, viruses and malware, and the number of applications running simultaneously)
- Home Network Connections (i.e. wired versus wireless (Wi-Fi) connections)
- Website Congestion
- Latency Fluctuations Outside of Norvado's Network (i.e. gaming servers)
- Router/Modem Model and Firmware

Norvado's architecture and engineering standards at the access layer are consistent throughout our entire network. Customers purchasing services in one geographic location should experience similar performance to those purchasing identical services in a different location. Copper network facilities may limit the services available in certain areas.

A2. Expected Performance

When ordering Norvado Broadband Internet Access Services, the service we quote is based on an advertised, "up to" connection speed. We are continually upgrading our network, but our quoted speeds are based on the characteristics of the relevant network facilities at the time of an order. We will confirm a customer's advertised speed at the time of installation.

The actual throughput customers experience may vary. During most periods, based on Norvado's evaluation, most customers can expect average speeds at or above 100% of the advertised, "up to" speed. Less than 10% of customers experience average speeds below the advertised, "up to" speed.

The Service speed is provisioned between the network device and the on-premise modem/Optical Network Terminal, and may vary due to physical condition of the line or other factors. The percentage of throughput received will vary depending on the amount of bandwidth our network uses to deliver Service to a customer, as well as other factors outside of Norvado's control. For example, customer location, the quality of the wiring and/or equipment within the home or premise, websites accessed by the customer, and usage of the network during peak hours all impact the final speed.

Latency, defined as the time it takes for a data packet to travel from one point to another in a network, is also highly variable. It can change due to the network path, other providers in the path, the distance to the destination, and performance of the end destination servers. Latency generally increases as the length of the route between the data source and destination increases; any congestion on the route can also increase latency. It decreases as the actual Internet speed increases. Norvado calculates latency by measuring the time it takes a data packet to travel from the customer's location to the closest measurement server and back. Norvado Internet customers should expect latency to most general Internet sites to be in the range of 10 to 60 milliseconds.

Packet loss, defined as the percentage of packets sent by the source, but not received by the destination, is also highly variable. Route congestion is the most common reason that a packet is not received. A small amount of packet loss is to be expected, and indeed, some Internet Protocols (IP) use the packet loss to understand Internet congestion and adjust the sending rate accordingly. Norvado denotes a packet as lost if the latency exceeds three seconds or if the packet is never received. Norvado Internet customers generally experience packet loss at a rate significantly lower than 1%, and therefore, unnoticeable to the user.

If, after purchasing service, a customer is not satisfied with the Service he/she is receiving, they should contact Norvado Support via phone at 800-420-4384 or email. Norvado's speed test site can be utilized by all to determine what Internet speeds one is actually receiving, simply go to norvado.speedtestcustom.com.

A3. Wi-Fi

Norvado customers who enjoy our Internet Service may also access Wi-Fi, provided the necessary equipment for a Wi-Fi connection has been installed. Wi-Fi access is provided on a "best efforts" basis. The performance experienced in accessing the Internet while connected to Wi-Fi can vary significantly from the performance experienced via a wireline connection.

A4. Impact of Other Data Services (Non-Broadband Internet Access Services)

Norvado utilizes our network facilities to provide customers with numerous other services, including Internet Protocol (IP)-based services such as Voice over IP telephone service, IP-delivered video service and Norvado security and automation services.

Norvado voice service traffic has a higher sensitivity to latency, and is handled with a special, Quality of Service (QoS) treatment. This has no material impact on the overall availability of bandwidth for Internet Services. Similarly, the Norvado IP-based video and security services have separately managed QoS treatments separate from Norvado Broadband Internet Service.

Some data services offered by Norvado, such as WatchTVEverywhere video streaming, are not managed within a closed network. The non-managed data services do not receive special QoS treatment. Norvado regularly monitors data usage, congestion and capacity to decide where additional network resources are needed.

B. Commercial Terms

B1. Norvado Residential Internet

Norvado provides a range of wireline, Residential Internet Services. Residential customers are bound by the terms of Norvado's Acceptable Use Policy (AUP). Prospective customers should read the AUP agreement before purchasing Internet Services from Norvado. The AUP may be changed at Norvado's discretion in accordance with the terms of the agreement. The current version is posted on Norvado.com/support.

Information about Norvado Residential Internet pricing, data plans and fees, and additional network services can be found on the Internet and Bundles pages of Norvado.com. Advertised pricing for residential customers may not include local, state or federal taxes. These web pages may also include standard promotional rates being offered in Norvado markets. Residential customers purchasing Internet, video, and/or voice services in a bundle package may incur additional taxes, fees and surcharges in conjunction with the non-Internet service(s). All Norvado Residential Internet packages include unlimited monthly data.

B2. Norvado Business Internet

Norvado provides a range of wireline, Business Internet Services. Business customers are bound by the terms of Norvado's Acceptable Use Policy (AUP). Prospective customers should read the AUP agreement before purchasing Internet Services from Norvado. The AUP may be changed at Norvado's discretion in accordance with its terms. The current version is posted on Norvado.com/support.

Information about Norvado Business Internet pricing, data plans and fees, and additional network services can be found on the Data and Bundles pages of Norvado.com. Norvado may offer special pricing and terms to business customers with a custom contract. Advertised pricing for business customers may not include local, state or federal taxes. These web pages may also include standard promotional rates being offered in Norvado markets. Business customers purchasing Internet, video, and/or voice services in a bundle package may incur additional taxes, fees and surcharges in conjunction with the non-Internet service(s). All Norvado Business Internet packages include unlimited monthly data.

B3. Early Termination Fees for Broadband Internet Access Service

Norvado Residential Internet customers are not subject to Early Termination Fees (ETF) if the cancellation or disconnection of service is initiated by Norvado. Customers are liable for unpaid, nonrecurring fees and monthly charges prorated through the last date of service. Some exceptions may apply.

Norvado Business Internet customers are not subject to ETF's if the cancellation or disconnection of service is initiated by Norvado. Customers are liable for unpaid, nonrecurring fees and monthly charges prorated through the last date of service. If a customer has a custom contract, then the terms of that agreement would determine any ETF. Some exceptions may apply.

B4. Privacy

Norvado protects customers' privacy throughout the process of providing him/her service, billing, and customer support. Norvado's Services are provided subject to Norvado's Privacy Policy.

B5. Contact Us

If a customer has a concern or question regarding his/her Norvado Internet Service, he/she may contact us using the information found here.

C. Network Practices

C1. Current Practices

The following describes Norvado's current network practices. This section will be updated as Norvado's practices change. Norvado may take any appropriate action to respond to events that have a significant effect on our customers' ability to use the Services or Norvado's ability to provide Services. These events include extraordinary levels of usage, denial of service attacks, or other emergencies.

Our network is managed in a way that allows us to achieve the goals of improving and expanding our service offerings and protecting customers. Norvado does not shape or throttle Internet traffic, or engage in other network practices based on the online content, protocols or applications a customer

uses, or by a customer's use of the network. Norvado's email server, cheqnet.net, uses other measures to ensure the best experience for our customers, including, without limitation: rate limiting of email (as set forth in our email policies), email storage limits (including deletion of dormant or unchecked email), and rejection or removal of spam or otherwise unsolicited bulk email.

C2. Port Blocking

Norvado does not port block under normal network operations. However, for your protection, the network's protection, bandwidth availability, and the rest of the Internet, Norvado may block or rate-limit connections on ports that are used to exploit other customers' or non-customers' computers.

C3. Congestion

Norvado engineers and operates our network to accommodate the necessary traffic requirements, with ample capacity and redundancy to address peak levels in the case of a partial network outage. Norvado also monitors data usage, congestion, and capacity 24/7 to decide where additional capacity in the network is needed. In the event of congestion, all traffic is classified as "best effort".

C4. Security Policy

Norvado is dedicated to managing our network to ensure that all customers receive the most secure online experience. We use industry-leading security practices to manage our network, provide services to our customers, and ensure compliance with our Acceptable Use Policy and the terms of our Internet agreement. These tools and practices change regularly to accommodate customers' network use and new technologies.

When malicious behavior is identified, Norvado deploys various techniques to help provide a positive, customer experience. Our security management techniques include ensuring that customers' systems are not propagating viruses, distributing spam email, or engaging in other malicious behavior. For example, we use industry-best practices to prevent virus/spam delivery to customer email accounts. We also automatically detect and mitigate Denial of Service (DoS) attacks for our Internet customers.

Specific security practices deployed by Norvado may include, but are not limited to:

Internet Protocol Spoofing Prevention

The basic protocol for sending data over the Internet network and other computer networks is called Internet Protocol (IP). The header of each IP packet contains the source and destination addresses of the packet. By forging, or spoofing, the header so it contains a different source address, an attacker can make it appear that the packet was sent by a different machine. The machine connected to the destination address that receives the spoofed packet will send a response back to the forged source address. This technique is mainly used when the attacker does not care about the response or the attacker has some way of guessing the response.

Norvado applies security measures to prevent IP Spoofing attacks against these machines and flooding the network with unwanted data that can cause congestion.

Denial of Service and Distributed Denial of Service Monitoring and Mitigation

A Denial of Service (DoS) or Distributed Denial of Service (DDoS) attack is an attempt to make a computer unavailable to its intended user(s). A DoS or DDoS attack is typically initiated by a person or group to prevent an Internet site or service from functioning efficiently or at all.

Norvado applies various security measures to prevent DoS or DDoS attacks within the network to ensure that customers can access the Internet when needed.

Norvado may block or rate-limit connections on other ports that are commonly used to exploit other customers' or non-customers' computers.

To protect our network and/or customers, Norvado may block Internet sites that are used in a malicious manner to infect customers' devices, perform fraud against them, and/or pose a threat in any way.