# **Carr Network Management**

# **Policy**

Carr Telephone Company, ("Carr" or "Company") provides this Policy in order to disclose its network management practices in accordance with the FCC's Open Internet Rules. Additional Information about Carr's other policies and practices concerning broadband service are also available under the <a href="http://home.carrinter.net/legald">[http://home.carrinter.net/legald</a> isclosures section of the website.

Carr manages its network to ensure that all of its customers experience a safe and secure broadband Internet environment that is fast, reliable and affordable. Carr wants its customers to indulge in all the Internet has to offer, whether it is social networking, streaming videos and music, or communicating through email and videoconferencing.

Carr manages its network for a number of reasons, including optimization, as well as congestion- and security-protocol-management. Such practices are consistent with reasonable network management actions and are intended to improve the overall performance for customers.

### **Network Management Practices**

Carr engineers its network and delivers fast, secure and reliable Internet service. Carr may use practices that include the following:

# I. Managing Congestion

Carr engineers its network to meet the traffic needs of its customers. Carr adds capacity to its network when links start to reach capacity. Carr may increase capacity by adding transport, Internet aggregation routers and bandwidth as needed.

On Carr's network all customers have access to all legal services, applications and content online and, in the event of congestion, most Internet activities will be unaffected. Some customers, however, may experience longer download or upload times, or slower surf speeds on the web if instances of congestion occur on the Carr network.

Customers using conduct that abuses or threatens the Carr network or which violates the company's Acceptable Use Policy, Internet service Terms and Conditions, or the Internet Service Agreement will be asked to stop any such use immediately. A failure to respond or to cease any such conduct could result in service suspension or termination.

Carr's network and congestion management practices are 'application-agnostic' based on current network conditions, and are not implemented on the basis of customers' online activities, protocols or applications. Carr network management practices do not relate to any particular customer's aggregate monthly data usage. Carr does not prioritize or discriminate against any applications or protocols except for specialized networks.

### II. Network Security

Carr knows the importance of securing its network and customers from network threats and annoyances. The company promotes the security of its network and patrons by providing resources to its customers for identifying and reporting such threats as spam, viruses, firewall issues, and phishing schemes. Carr also deploys spam filters in order to divert spam from an online customer's email inbox while allowing the customer to control which emails are

identified as spam. Spam is quarantined in a separate file that the Customer may access. Email in such file will be automatically deleted if not accessed.

As its normal practice Carr does not block any protocols, content or traffic for purposes of network management except that the company may block or limit such traffic as spam, viruses, malware, or denial of service attacks to protect network integrity and the security of our customers. Carr does filter ports to reduce the spread of computer-related viruses and protecting your computer from intruder access. If Carr suspects traffic originated by its customers is virus related, Carr will contact the suspected party. If there is no response, the customer's service will be suspended until the issue can be resolved.

Carr does not currently engage in any application-specific behaviors in its network, except as maybe listed in the Specialized Service section of this policy.

## Ill. Monitoring Schedule

Carr monitors the network for performance and provides performance regularly. In the backbone network, alarms or alerts are generated if the performance is degraded. In addition, traffic is analyzed and trended to insure peak performance. Carr adds capacity or to relieve congestion when identified. Carr also uses industry standard software tools to check for abnormal traffic flows, network security breaches, malware ,loss, and damage to the network. If a breach is detected or high volume users are brought to light by complaint, Carr provides notification to the customer via email or phone. If a violation of Carr's policies has occurred and such violation is not remedied, Carr will seek to suspend or terminate that customer's service.

# M. Network Management Technology

Carr employs a variety of industry-standard tools, applications and devices to monitor, secure and maintain its network, including the following:

- -network graphing solutions;
- -latency measurement software; and
- -bandwidth and performance measurement platforms;

## V. Service Descriptions

Carr offers broadband service over Digital Subscriber Line technology. Carr offers speeds ranging from 1.5 Mbps to 9 Mbps. Service offerings are detailed in the services section of the website [http://home.carrinter.net/internet/dsl.php]. All of Carr's broadband service is capable of supporting real time applications.

#### V Network Performance

Carr broadband services are best effort performance. Carr makes every effort to support advertised speeds and will dispatch repair technicians to customer sites to perform speed tests as needed to troubleshoot and resolve speed and application performance issues that are caused by Carr's network. Carr measures availability, latency, and aggregate utilization on the network and strives to meet internal service level targets in its network. However, the customer's performance is also affected by the particular website being accessed, capacity in the public internet beyond the Carr network and the customer's computer, inside wiring, wireless router and other customer equipment.

Customers can test their actual speeds using the speed test found on the company website [www.carrinter.net/speedtest.net]. Carr is in the process of developing additional systems/processes that will allow us to measure the performance of the Carr controlled network compared to advertised speeds. Once these systems are developed, Carr will disclose the results on its website.

### Specialized Services

Carr provides Internet Protocol Television (IPTV) services to end users using virtual private network architecture. This service, also known as a Specialized Service, is separated from the company's best effort Internet services. Specialized Service traffic is does not interfere with the best efforts internet service.

#### M Device Attachment Rules

A DSL modem ADSL 2+ is required to access the broadband service. Customer may attach any industry standard device which is compatible with the Carr network or purchase the modem from Carr. Beyond the modem, Customers' equipment must have the minimum requirements to operate properly with the broadband service:

- Microsoft Windows: Windows 7 and higher
- Macintosh:

If Carr discovers a customer device is harmful to its network, Carr has the right to request that the customer remove such device.

If you have any questions, complaints or requests for additional information, please contact Carr at 231-898-2244 or <a href="http://home.carrinter.net/contact.php">http://home.carrinter.net/contact.php</a>