# Network Management Disclosure

# MID-HUDSON CABLEVISION, INC.'S DESCRIPTION OF NETWORK MANAGEMENT PRACTICES, PERFORMANCE, AND COMMERCIAL TERMS FOR DEDICATED INTERNET (AS OF SEPTEMBER 2018)

The Federal Communications Commission ("FCC") has adopted rules that require broadband Internet access service providers such as Mid-Hudson Cablevision, Inc. and its subsidiaries providing the services ("Mid-Hudson"), to publish certain information about their services. See 47 C.F.R. §§ 8.1-8.11. In accordance with those rules, this document provides information concerning three aspects of the dedicated broadband Internet access services that Mid-Hudson provides to customers (1) the practices that Mid-Hudson employs to manage its network, (2) key performance characteristics of Mid-Hudson's dedicated Internet access service offerings, and (3) certain commercial terms applicable to these services. These disclosures are intended to provide information to schools and libraries that currently purchase Dedicated Internet Access service through participation in the federal "E-rate" program (or that may do so in the future), as well as to providers of applications, services, and content that make use of Mid-Hudson's network to reach users.

The broadband marketplace is dynamic and constantly changing. While this document is intended to be thorough and current, Mid-Hudson expects to continue evaluating its approach to network management in response to changes in technology and Internet usage, and it reserves the right to adopt new or different network management practices. Mid-Hudson will provide updates regarding such changes when warranted, and the information provided in this statement may be revised and updated from time to time. In addition, other aspects of Mid-Hudson's services—such as prices and performance capabilities—are subject to change. Updated information can always be found by visiting Mid-Hudson website at http://www.mhcable.net/internet/NetworkDisclosure

# I. NETWORK MANAGEMENT PRACTICES

Mid-Hudson endeavors to provide its customers and others who use its network with quality service. To further this goal, Mid-Hudson utilizes various tools and techniques to address external factors that may undermine the quality of network performance.

### A. Network Congestion

Mid-Hudson's Dedicated Internet Access service is provided using dedicated facilities and bandwidth and is often provided pursuant to service level agreements. Accordingly, customers generally will not be impacted by network congestion. Mid-Hudson has monitoring systems and procedures that enable us to monitor the utilization on each network segment. As utilization increases we address each situation in an industry standard way allowing us to avoid situations where if left alone would become congested.

### B. Device Attachment Rules

Mid-Hudson Cablevision, Inc. only allows Mid-Hudson's provided modems to be provisioned on our network. This is necessary to ensure security and performance. Because of this policy we do not charge any rental fees for this equipment and Mid-Hudson does not charge for repair or replacement of modems.

### C. Network Security Measures

Mid-Hudson actively seeks to address the threats posed by harmful and unwanted traffic and thus to protect the security and integrity of its network and its customers. Indeed malicious software (often referred to as "malware") such as viruses, worms, spyware, and distributed denial of service ("DoS") attacks not only can adversely affect the network, but also can result in harm to customers' computers and the quality of the service they receive, compromise their data, and harm third parties as well. Unwanted communications such as spam can lead to similar problems.

Mid-Hudson provides a range of tools to its customers to enable them to respond to such risks, offering both free and premium options for anti-virus and anti-phishing software, spyware, and adware.

All inbound e-mail is scanned for viruses, and messages found to contain viruses are discarded. In addition, to reduce spam, Mid-Hudson limits outbound e-mails to a set number of messages a day and checks all inbound e-

mail against a series of reputation services in order to identify and block known spammers, consistent with common industry practices. All inbound e-mail is spam-scanned, and messages tagged as spam are deposited in a special spam folder, accessible by webmail.

In addition, Mid-Hudson employs certain practices on a case-by-case and as-needed basis to protect its network and its customers against distributed Denial of Service ("DDOS") attacks. These practices (which could include limiting traffic to DNS and DHCP servers) could be triggered if Mid-Hudson detects traffic levels that significantly exceed certain baselines; the applicable thresholds are not disclosed here, in order to ensure that these security practices remain effective and cannot be deliberately circumvented. Further, in accordance with common industry practices (and in response to demonstrated harms), Mid-Hudson may on occasion and for limited periods of time inhibit certain Internet ports that are commonly misused to harm networks, although this in no way prevents any Mid-Hudson customer or broadband Internet access user from accessing lawful Internet content.

#### D. Application-Specific Behavior

Mid-Hudson does not prevent users of its service from sending and receiving the lawful content of their choice; running lawful applications and using lawful services of their choice; provided that such applications and services do not harm the network or the provision of broadband Internet access services, facilitate theft of service, or harm other users of the service. Similarly, Mid-Hudson does not impair or degrade particular content, applications, or services.

## **II. PERFORMANCE**

### A. Description of Mid-Hudson's Dedicated Internet Access Service

Mid-Hudson Cablevision, Inc. owns and operates a state of the art Fiber Network that consists of over 1200 miles of core backbone facilities. Our data network is supported by a geographically redundant fiber ring with multiple tier peers. Our latest upgrade which is underway and is slated to be completed October 2018 will result in multiple 100 GB upstream connections, One peer traverses south to 111 8th Street, New York City, New York is the Google Owned Carrier Hotel. This connection is with Hurricane Electric and is dedicated 100 GB bandwidth with a guarantee no more than 2 hops to any destination worldwide. Our second 100 GB Peering point travels North to First Light communications, 11 North Pearl Street, Albany, New York. First Light provides a blended connection to their multiple tier 1 providers.

Dedicated Internet Access services can be customized with additional services such as web-hosting, domain name services, static IP, email, and managed security services. Mid-Hudson's Dedicated Internet Access service is often provided pursuant to service level agreements, which include performance capabilities that are tailored to the needs of the particular customer. As such, the precise performance metrics will vary. Another technical aspect of broadband performance is "latency"—the average time for a data packet to travel from one point on the network to another.

When offered in conjunction with a service level agreement, Dedicated Internet Access is provided with assurances that customers will actually experience the performance capabilities assured by Mid-Hudson. For information concerning the performance metrics applicable to your service or available from Mid-Hudson, please consult your service order or contact a customer service representative.

### B. Description and Impact of Specialized Services

The FCC's rules require us to address services that share bandwidth with broadband Internet access services, but that do not necessarily include broadband Internet access capability or are not primarily intended to be used for that purpose—a category the FCC calls "specialized services." Customers of Dedicated Internet Access may purchase some of these services. However, because Dedicated Internet Access is provided over dedicated facilities and is often subject to performance assurances, it will not be impacted by any specialized service, and vice versa.

### III. COMMERCIAL TERMS

Mid-Hudson has built the most advanced fiber network throughout Columbia and Greene Counties enabling businesses to access the Internet with a direct fiber connection – greater capacity, greater reliability – connection speeds available from 2 Mb to 1 Gb – fully redundant network — customized connections for every business. Mid-Hudson Cable's Business Class has Communications and Internet Solutions for local businesses, from One person shops to Global Enterprises. Instantaneous e-mails and lightning fast downloads – all fueled by a dedicated, high-speed, digital cable modem and cable phone make our Communication Services a fast, affordable and efficient business tool.

#### A. Pricing

Dedicated Internet Access is provided pursuant to customer specific agreements. As such, there are no standardized prices for this offering, and the price will vary depending on your particular needs. Current subscribers can find pricing information concerning their service on their monthly bill or by contacting a customer service representative or by visiting our website at www.mhcable.com.

#### B. Privacy

Customer's privacy interests, including Customer's ability to limit disclosure of certain information to third parties, may be addressed by, among other laws, the Federal Telecommunications Act (the "Telecommunications Act"), the Federal Cable Communications Act (the "Cable Act"), the Electronic Communications Privacy Act, and, to the extent applicable, state laws and regulations. Customer proprietary network information and personally identifiable information that may be collected, used or disclosed in accordance with applicable laws is described in Attachment B (Voice Services) which is incorporated herein by reference. In addition to the foregoing, Customer hereby acknowledges and agrees that Company may disclose Customer's and its employees' personally identifiable information as required by law or regulation, or the American Registry for Internet Numbers ("ARIN") or any similar agency, or in accordance with Company's Privacy Policy. In addition, Company shall have the right (except where prohibited by law notwithstanding Customer's consent), but not the obligation, to disclose any information to protect its rights, property and/or operations, or where circumstances suggest that individual or public safety is in peril

This Privacy Policy applies to all websites and all subscribers AND visitors. Preserving our subscribers privacy is important to Mid-Hudson and we offer this policy to help you better understand our policies. We encourage you to read it thoroughly and to periodically check for updates. MID-HUDSON reserves the right to change the terms of this Privacy Policy at any time. By subscribing to our services or using our website, you expressly consent to the terms of this policy and any changes that may be made by MID-HUDSON.

INFORMATION COLLECTION In order to provide you with high-quality Internet service, MID-HUDSON collects personal information regarding our subscribers. In order to set up your account, we collect information such as your name, address, email address, telephone number and financial information (such as credit card information) for billing purposes. In order to establish your service, we collect technical information about your computer and other hardware and software in order to effectively provide you Internet service. Throughout the term of you service, all of the information collected by MID-HUDSON may be updated, changed and integrated.

USE OF INFORMATION. MID-HUDSON collects and maintains subscriber information purely to better service its subscribers AND as a matter of law. MID-HUDSON does not sell your information to any third-parties. MID-HUDSON may use your information for the following purposes: (a) for billing or collection purposes; (b) to install, service and maintain your subscription; (c) fraud detection and prevention; (d) to evaluate your service for potential upgrades; (e) to provide you with information about additional products or services; (f) to analyze our subscriber base to evaluate ways to better provide Internet service; (g) to detect unauthorized use of our service; or (h) to evaluate new technologies. In order to accomplish these purposes, MID-HUDSON may disclose your information to our employees, our affiliates, others who work with us, professional advisors, attorneys, accountants, potential business partners, vendors, data management consultants and regulators. In addition, MID-HUDSON may disclose your information to third-parties in order to enforce your Customer Agreement or other agreements; if required to by law, subpoena or order of a court of competent jurisdiction; or, to defend ourselves against legal claims.

MINORS You must be 18 years of age to subscribe to MID-HUDSON's services. MID-HUDSON does not knowingly collect or maintain information regarding individuals under the age of 18.

Customers. If you have any questions about Mid-Hudson's Dedicated Internet Access service or any questions or concerns regarding any of the information set forth above and wish to contact a customer service representative, please contact us directly at 1-800-342-4500. Providers of applications, services, and content. Providers of applications, services, or content with questions or complaints about Mid-Hudson's policies in connection with its Dedicated Internet Access service should contact us directly.