HEART OF IOWA COMMUNICATIONS COOPERATIVE NETWORK MANAGEMENT POLICY Page **1** of **4**

As an Internet service provider ("ISP") Heart of Iowa Communications Cooperative ("Heart of Iowa") invests significant resources to bring Internet access to our customers and strives to provide customers an optimum online experience that enables them to access all available and lawful online content and services. The purpose of this document is to disclose information regarding Heart of Iowa's network management practices, performance, and commercial terms of its broadband Internet access service, sufficient for consumers to make informed choices regarding use of such services and for content, application, service, and device providers to develop, market, and maintain Internet offerings, consistent with applicable federal regulations.

In delivering broadband Internet access services, Heart of Iowa may utilize wholesale or other "upstream" providers. This Network Management Policy is specific to Heart of Iowa's network and network management practices, and services may also be subject to the network performance and network management policies and practices of our upstream providers.

NETWORK MANAGEMENT PRACTICES

<u>General</u>. High-speed bandwidth and network resources are limited and managing the network is essential to promote the use and enjoyment of the Internet by all of our customers. Heart of Iowa is committed to providing the best online experience possible for all of its customers and uses reasonable network management practices to ensure that our services are used in ways that are consistent with the specifications of a shared network. The network management practices used by Heart of Iowa are consistent with industry standards. For example, we use tools and practices to reduce the negative effects of spam, viruses or other harmful code or content, security attacks, network congestion, and other risks and degradations of the service. By engaging in reasonable and responsible network management, Heart of Iowa can deliver the best possible broadband Internet experience to all of its customers.

The primary features of Heart of Iowa's network management practices are:

- Heart of Iowa does not block, throttle, or inhibit any lawful content, specific applications or classes of applications.
- Heart of Iowa does not restrict the types of devices that can be connected to its network.
- Heart of Iowa does not engage in paid prioritization or affiliated prioritization.

<u>Congestion Management</u>. Heart of Iowa proactively monitors its network on a continual basis to determine if an area of congestion could occur, and if areas of possible congestion are identified, may make network improvements or prior to any congestion occurring. These network improvements may include: the addition of network hardware or network segregation to accommodate additional traffic. If a period of congestion occurs, customers may experience things like: longer times to download or upload files; surfing the Web may seem somewhat slower; or playing games online may seem somewhat sluggish. Heart of Iowa does not manage congestion based on the online activities, protocols or applications an individual customer uses; it only focuses on the areas with the heaviest usage and works to alleviate any congestion prior to any customer impact. The purpose is to eliminate periods of congestion as quickly as possible.

<u>Application or Content Specific Behavior</u>. Heart of lowa does not discriminate against particular types of lawful online content. Heart of lowa provides its customers with full access to all the lawful content, services, and applications that the Internet has to offer. However, we are committed to protecting customers from spam, phishing, and other unwanted or harmful online content and activities. In that connection, we use industry standard tools and generally accepted practices and policies to help ensure that our customers are protected from unwanted or harmful content and activities. Heart of Iowa's use of these tools, techniques and policies help to

identify and restrict certain harmful and unwanted online content, such as spam or phishing Web sites. In other cases, these tools, techniques and policies may permit customers to identify certain content that is not clearly harmful or unwanted, such as bulk email or Web sites with questionable security ratings and enable those customers to inspect the content further if they want to do so.

<u>Device Attachments</u>. Heart of Iowa allows for customer owned equipment to be used on the network, so long as such devices do not interfere with the Heart of Iowa's network or Heart of Iowa's ability to provide the services. Customer-owned devices are not supported or managed by Heart of Iowa.

<u>Security</u>. Heart of Iowa (directly or via upstream providers) employs a number of practices to help prevent unwanted communications such as spam as well as protect the security of our customers and network. These practices may include: limiting the number of login, SMTP, DNS, and DHCP transactions per minute (at levels far above "normal" rates) that customers can send to servers in order to protect them against Denial of Service (DoS) attacks and blocking ports that commonly used to send spam, launch malicious attacks, or steal a customer's information, (for example, SQL exploits and Microsoft communication protocol ports). We do not make detailed disclosures concerning these practices in order to better maintain the effectiveness of these defensive measures, which ensure that these critical services are available for all of our customers. In addition, Heart of Iowa conducts several security initiatives, and offers security tools for our customers, such as DoS monitoring and virus scanning software.

SERVICE PERFORMANCE

<u>Service Technologies</u>. Heart of Iowa provides broadband Internet access utilizing fiber, coaxial, copper and wireless service technologies. Speed and other performance characteristics may vary based on service technology, and not all service technologies are available in all locations.

<u>Advertised Speeds</u>. Heart of lowa provides residential and business customers with a variety of high speed Internet service packages, including the service packages and performance tiers identified in "Commercial Terms" below. Heart of lowa advertises its speeds as "up to" a specific level based on the tier of service to which a customer subscribes, and engineers its network to ensure that its customers can enjoy the speeds to which they subscribe. However, Heart of lowa does not guarantee that a customer will actually achieve those speeds at all times. In the absence of purchasing an expensive, dedicated Internet connection, no ISP can guarantee a particular speed at all times to a customer.

<u>Actual Speeds and Latency</u>. The "actual" speed that a customer will experience while using the Internet depends upon a variety of conditions, many of which are beyond the control of any ISP. These conditions include:

- Performance of a customer's computer or device, including its age, processing capability, its operating system, the number of applications running simultaneously, and the presence of any adware and viruses. You should make sure you are running the most up-to-date operating system your computer or other Internet connected device can handle (with all available patches installed) to maximize your connection speeds.
- Type of connection between a customer's computer and modem. If there is a wireless router between your modem and your Internet connected device, the connection speed you experience can often be slower than direct connections into a router or modem, and depends on the model and configuration of the router that you use. Certain routers are able to pass data to your Internet connected device more

quickly than others. Wireless connections also may be subject to greater fluctuations, interference and congestion. Wireless modem connections used with higher speed tiers may be particularly impacted, as many wireless connections do not perform at the speeds delivered by these tiers.

- 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 modems or other equipment installed at your premises. Modem performance may
 degrade over time, and certain modems are not capable of handling higher speeds. Our highest speed
 services may be particularly impacted by computer and communications limitations. We encourage you
 to promptly contact Heart of Iowa's customer service if you have any concerns about your modem
 performance or speed capabilities.

<u>Real Time Applications</u>. Heart of Iowa offers a variety of service packages, with different speeds. For each of these packages, Heart of Iowa utilizes service technologies with latency characteristics suitable for real-time applications such as voice communication or video streaming services.

<u>Customer Speed Test</u>. Heart of Iowa offers its customers to the ability to test the speeds that they are receiving on Heart of Iowa's network from the customer's computer. Simply go to the speed test site for your service location to test your connection at: <u>https://home.heartofiowa.net</u> , click on Speed Test. Please note that this and other commercially available speed tests are dependent on several of the factors outlined above, especially the customer's own Wi-Fi network. Therefore, these tests do not necessarily reflect the performance of Heart of Iowa's network alone.

COMMERCIAL TERMS

<u>Service Packages</u>. Heart of Iowa offers a variety of service packages, which include pricing for Internet services that vary depending upon the plan and whether the services are bundled with Heart of Iowa's other service offerings (bundled pricing available for residential only; see page 4 for pricing). Please see below for monthly pricing information for our currently available service packages:

Residential & Business Plans:

Fiber:	<u>Upload</u>	<u>Download</u>	<u>Price</u>
LightNET 100 Mbps	Up to 100 Mbps	Up to 100 Mbps	\$49.95
LightNET 250 Mbps	Up to 250 Mbps	Up to 250 Mbps	\$99.95
Copper: LightNET 10 Mbps	Up to 1 Mbps	Up to 10 Mbps	\$49.95

Residential Bundle Plans: The following rates are not available in Gladbrook, Le Grand or Marshalltown exchanges.

Fiber:	<u>Upload</u>	<u>Download</u>	<u>Price</u>
Phone + LightNET 100 Mbps	Up to 100 Mbps	Up to 100 Mbps	\$84.90
Phone + LightNET 250 Mbps	Up to 250 Mbps	Up to 250 Mbps	\$129.90
Phone + TV + LightNET 100 Mbps	s Up to 100 Mbps	Up to 100 Mbps	\$182.75
Phone + TV + LightNET 250 Mbps	s Up to 250 Mbps	Up to 250 Mbps	\$227.75
Copper:			
Phone + LightNET 10 Mbps	Up to 1 Mbps	Up to 10 Mbps	\$84.90
Phone + TV + LightNET 10 Mbps	Up to 1 Mbps	Up to 10 Mbps	\$178.95

Except as disclosed above, Heart of Iowa does not limit the amount of usage (by imposing specific data caps) or impose usage-based fees. Except as disclosed above, Heart of Iowa also does not impose fees for early termination.

<u>Impact of Non-Broadband Internet Access Services</u>. Heart of Iowa does not currently offer other data services that affect the last-mile capacity or performance of our broadband Internet access services.

<u>Privacy and Other Policies</u>. In addition to this Network Management Policy, Heart of Iowa's broadband Internet access services are subject to Heart of Iowa's Privacy Policy, Acceptable Use Policy and Terms of Service, the most recent version of which are located at <u>https://home.heartofiowa.net/company-info/legal-policies/</u>.

<u>Redress Options</u>. If you have questions, concerns or inquiries regarding this Network Management Policy or customer redress options, please contact our Customer Service department via phone at: 800-806-4482 or email at <u>customerservice@heartofiowa.coop</u>.