

## • **Broadband Internet Access Disclosure**

This document provides information about the network practices, performance characteristics, and commercial terms applicable broadband Internet access services provided by Big Bend Telephone Company, d/b/a BigBend.net (“Big Bend”) to customers. The document is provided as required by the Federal Communications Commission’s Open Internet Rules.

Big Bend maintains an open Internet for its customers, and with this principle in mind, this document summarizes Big Bend’s network management practices and the performance characteristics and commercial terms of the broadband Internet access services that Big Bend offers to its customers. Nothing in this document changes your rights and obligations, or Big Bend’s rights and obligations, under the terms of service associated with your applicable Big Bend products and services, or Big Bend’s Acceptable Use Policy or Privacy Policy. This document and the information contained in it are provided for informational purposes only and may be changed at any time, without notice.

### **I. NETWORK MANAGEMENT PRACTICES.**

Big Bend manages its network with the goal of delivering the best possible broadband Internet experience to all of its customers. High-speed bandwidth and network resources are not unlimited, and are particularly costly to deploy in the less densely populated rural areas that characterize much of Big Bend’s service areas. The Internet service provided to customers by Big Bend is obtained through contractual arrangements with major Internet access carriers providing wholesale Internet transport services to Big Bend. As a result, many of Big Bend’s network management practices and the performance characteristics described in this document may be directed, implemented and monitored by Big Bend’s wholesale Internet transport carriers on behalf of Big Bend and for the maintenance and protection of the carriers’ own respective networks. References in this document to Big Bend’s actions and policies necessarily include the actions and policies of Big Bend’s underlying carriers in connection with utilization of the carriers’ networks by Big Bend and its customers. Accordingly, any reference to Big Bend below may include the applicable Internet access carriers providing services on Big Bend’s behalf to the customer.

Protecting and managing the network is essential to promoting the use and enjoyment of the Internet by all of Big Bend’s customers. Big Bend reserves the right to employ reasonably tailored Internet Protocol (“IP”) network management practices that are consistent with industry standards for such networks. Such practices would ensure that all customers and application providers have access to a fair share of Big Bend’s network while not unreasonably discriminating in transmitting lawful broadband traffic. Big Bend and its service providers also try to use tools and technologies that are minimally intrusive. Just as the Internet continues to change and evolve, so too will Big Bend’s network management practices adapt to address the challenges and threats on the Internet. By engaging in reasonable and responsible network management practices, Big Bend strives to enhance its delivery of the best possible broadband Internet experience to all of its customers.

**Blocking.** So long as traffic is not malicious or harmful to its network, Big Bend does not block certain applications or classes of applications sourced from, or destined to, the public Internet. Rather, Big Bend seeks to provide the best customer experience for all types of applications.

**Throttling.** Big Bend does not engage in throttling of Internet services.

**Affiliated Prioritization.** Big Bend does not engage in affiliated prioritization.

**Paid Prioritization.** Big Bend does not engage in paid prioritization.

**Congestion Management.** All Internet traffic is considered “best effort”, and is therefore subject to congestion management processes by Big Bend, its carriers and their peer Internet service providers. Internet Service Providers such as Big Bend use a combination of buffering and “first in first out” tools to accomplish the goal of lessening the impact caused by network congestion. Selection of traffic to delay during times of congestion will be completely random and all customer traffic regardless of their bandwidth usage or network application will be equally subject to the same factors of randomization. Customer traffic is congestion-managed not based on the applications or content being used, but based on current network conditions and recent amounts of data transferred by users.

**Dedicated Internet Access Service.** A product Big Bend offers to certain commercial and governmental customers under customer-specific contracts is Dedicated Internet access service. Dedicated Internet access service provides the capability to connect to the Internet over Big Bend’s fiber-based infrastructure and provides bandwidth dedicated to the customer’s exclusive use. Dedicated Internet Access service is designed for commercial and governmental customers seeking substantial bandwidth for technology requiring high availability and low latency. Dedicated Internet Access services are generally customized with additional services such as web-hosting, domain name services, static IP, email, and managed security services.

Big Bend’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 such as throughput speed will vary with each customer contract. 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 Big Bend.

Because the service level agreements and terms of Dedicated Internet Access services vary with each customer and are dependent upon availability of Big Bend’s fiber network to the customer, for information concerning the performance metrics applicable for a Dedicated Internet Access service, please contact Big Bend representatives directly to discuss the service.

**Application-Specific Behavior.** Big Bend 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; or connecting their choice of legal devices (subject to the discussion below), 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, Big Bend does not impair or degrade particular content, applications, services, or non-harmful devices.

The broadband marketplace is dynamic and constantly changing. While this document is intended to be thorough and current, Big Bend 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.

**Device Attachment Rules.** Big Bend permits its customers to attach any device to its network, so long as the device’s usage does not harm Big Bend’s network or otherwise violate Big Bend’s Acceptable Use

Policy which can be found at <http://www.bigbend.net/legal/legal-acceptable-use-policies/>. Not all such devices, however, may be technically compatible with Big Bend's network. The technical compatibility of a device will vary depending on the broadband Internet access service to which it is being attached.

Big Bend and its carriers operate service operations centers that monitor the network for abuse and fraud. When Big Bend determines the presence of suspicious, malicious, criminal, or abusive traffic, or other activity that violates Big Bend's Acceptable Use Policy, Big Bend temporarily may block access from or to its network to protect the security of its network and its customers. This measure may be triggered by, among other conditions, a denial-of-service ("DDoS") attack or by Big Bend (or its carriers) detecting an unusual amount of traffic that may be related to computers infected with malicious software. If a customer believes that Big Bend is blocking such traffic in error, the customer should contact Big Bend's customer support at 1-800-520-0092 or [poc@bigbend.com](mailto:poc@bigbend.com).

**Security.** Big Bend 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 ("DDoS") 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.

Big Bend encourages its customers to protect themselves from malicious Internet content utilizing a wide variety of commercially-available tools such as anti-virus, firewalls, and anti-malware tools. It is the customer's responsibility to initiate and maintain safeguards as to the customer's services and equipment, including adequate and secure passwords, updated anti-virus software and other protections for the customer's equipment applicable to the services.

Big Bend may employ 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 could be triggered if Big Bend or its carriers detect 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), Big Bend 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 is intended to prevent any Big Bend customer or broadband Internet access user from accessing lawful Internet content.

## II. PERFORMANCE CHARACTERISTICS

**Service Description.** Big Bend offers Internet services through a variety of technologies, including DSL services connected to Big Bend's fiber and/or copper facilities, Fiber To The Home (FTTH) or through fixed wireless services. The technology deployed depends upon the customer's service location, availability of Big Bend facilities and other factors. Depending upon the technology and the level of service the customer elects to purchase, Big Bend's Internet access services provide a number asymmetric and symmetrical speed profiles. DSL speeds are available up to a maximum of 18 Mbps Down and 3Mbps Up. FTTH speeds are available in a 400 Mbps Down and 25Mbps Up. Fixed wireless speeds are available up to a maximum of 18 Mbps Down and 3 Mbps Up. Optimum speeds are dependent upon many factors including specific technology deployed for a customer connection, loop

length and a variety of other factors that may or may not be inside of Big Bend's control including such things as the number of devices the customer elects to connect to the Internet modem/router.

Big Bend provisions its network to ensure that its customers can enjoy the speeds to which they subscribe. However, Big Bend does not guarantee that a customer will actually achieve those speeds at all times. No Internet Service Provider can guarantee a particular speed at all times to a customer. Big Bend advertises its speeds as "up to" a specific level based on the tier of service to which a customer subscribes.

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 Big Bend. These conditions include:

- Performance of a customer's computer, including its age, processing capability, its operating system, the number of applications running simultaneously, and the presence of any adware, malware and viruses.
- Type of connection between a customer's computer and modem/router. For example, wireless connections may be slower than wired connections into a router or modem. Wireless connections also may be subject to greater fluctuations, interference and congestion from other common household electronics including, but not limited to, microwave ovens. Big Bend does not recommend wireless modem connections for use with its higher speed tiers as many wireless connections typically are not capable of supporting speeds delivered by these tiers particularly when multiple devices are connected to the wireless modem/router.
- 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 the customer's Internet connection.
- Congestion or high usage levels at the website or destination can impact a customer's Internet connection speed. 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 may impact a customer's Internet connection speed. 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 and impact their download speeds.
- 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. However, Big Bend strives to maintain its network such that customers can achieve a latency of less than 100 milliseconds.

There are numerous products and services available to test Big Bend's services. These tests are heavily dependent on a customer's home network configuration, modem, and computers, and therefore do not reflect the performance of the Big Bend network only. Big Bend also may be able to provide testing of the services to assure that customer is receiving the subscribed bandwidth. If the tests demonstrate the customer's services are degraded from the speeds delivered by Big Bend's network, the customer should evaluate problems with the customer's equipment at the premises and any software issues associated with the use of that equipment.

*Impact of Non-Broadband Internet Access Service Data Services.* Big Bend offers broadband Internet access service over the same last-mile facilities as specialized services, such as virtual private network ("VPN"), voice over IP ("VoIP"). In most cases, when the specialized service is not being used, customers may use the capacity that would otherwise be used for the specialized service for broadband Internet access. When these customers do utilize the special services, less bandwidth will be available for broadband Internet access service than when they are not using the specialized services.

### **III. COMMERCIAL TERMS.**

*Price.* The terms of service for Big Bend's Internet access services are set forth in the materials specific to that service and are also available at <http://www.bigbend.net/legal/legal-internet-terms-conditions/>. Big Bend offers various pricing options for its Internet access services depending upon location, bandwidth needs and other terms and conditions.

Current customers can find pricing information concerning their service on their monthly bill or by contacting a customer service representative. Prospective customers can obtain pricing information for Big Bend's customer service representatives.

*Privacy.* Big Bend's privacy policy applicable to its Internet access service is available at <http://www.bigbend.net/legal/legal-privacy-policy/>.

*Redress Options.* If you have any questions about Big Bend's service or any questions or concerns regarding any of the information set forth above and wish to contact a customer service representative may do so through our website at [csr@bigbend.com](mailto:csr@bigbend.com) or by calling our offices at 1-800-592-4781.