

## **US Signal Broadband and Network Management**

(Last updated June 7, 2018)

This document summarizes US Signal's network management practices, product performance metrics and commercial terms for its broadband and dedicated Internet access customers, including schools and libraries.

### **NETWORK PRACTICES:**

## **Congestion Management**

US Signal approaches congestion management from the perspective of ensuring network stability and the highest performance for all users throughout its network. Therefore, the use of congestion management is limited to situations of exceedingly high congestion, such as surrounding a catastrophic event or a malicious attack ("Denial of Service") directed towards the US Signal network or its customers' networks.

US Signal does not rate-limit or throttle/cap individual customers based on their usage exceeding a predetermined threshold. Customers are able to use their full purchased bandwidth as long as said usage conforms to US Signal's Acceptable Use Policy.

# **Application Specific Behavior**

US Signal does not block or inhibit certain applications or classes of applications sourced from, or destined to, the public Internet.

#### **Device Attachment Rules**

US Signal's customers are permitted to attach any device to US Signal's network so long as it does not damage or cause harm to US Signal's network or other customers utilizing US Signal's network. While US Signal does not restrict the devices that may be connected to its network, not all devices may be technically compatible due to the different ways in which service hand-off may be provisioned. All devices connected to its network are also subject to US Signal's Acceptable Use policy.

#### Security

US Signal's focus is providing the most stable and robust service to its customers. Part of ensuring this is to actively monitor the network for abuse and fraud. When US Signal becomes aware of traffic that is malicious, criminal, abusive in nature, or otherwise violates US Signal's Acceptable Use Policy, action may be taken to temporarily block this traffic from entering or exiting US Signal's network. This action is to protect the security and integrity of the US Signal network, its customers, as well as, the larger Internet community.



#### **PERFORMANCE METRICS:**

# **Service Description**

US Signal offers broadband, dedicated Internet access services to its customers through a variety of access method technologies, including Ethernet over Copper (EoCu), DS1/DS3 TDM with or without Ethernet conversion, direct fiber and Native Ethernet. Such access availability is varied by market within the network footprint. Bandwidth is delivered in increments between 1.5 Mbps and 10.0 Gbps.

US Signal's Internet access speeds are dependent upon the access method chosen by its customer. Technologies like EoCu rely on distance sensitive copper loop facilities that may not be able to deliver the marketed rate until those services are installed and tested. US Signal's Internet access service is symmetrical, meaning both the download and upload speeds are the same. While customer services are not restricted in any way from utilizing their full ordered bandwidth, there are many factors that can prevent the overall effective bandwidth to be less than the maximum speed. Issues such as customer's network or user computer configurations, number of users, congestion or capacity issues on servers accessed, and overall Internet congestion are all factors that can contribute to a customer's speed being less than the marketed rate.

US Signal does not guarantee speed, rather it guarantees the Internet port provisioned on US Signal's data backbone shall have an availability metric of 99.995%. See http://www.ussignalcom.com/products/internetaccess/internet-service-agreement for more information regarding US Signal's Service Level Agreement for its Internet access service.

### **Optional, Specialized Services**

In addition to broadband Internet service, US Signal offers other products (e.g. MPLS VPN or Virtual Ethernet) that may share the same physical access method, but are logically segregated from the Internet access product. When US Signal delivers multiple services in this manner there is always enough bandwidth to handle the sum of the services provided. For example, if there is a 10.0 Mbps broadband Internet port delivered with a 20.0 Mbps MPLS VPN port in a separate logical circuit, then there would be 30.0 Mbps of access bandwidth available to ensure that both services can be used to their full potential without congestion. If US Signal were to offer a converged access product where there was a shared bandwidth situation, then the preference and priority choices would be disclosed up front.

US Signal also offers a Quality of Service or "QOS" product as an add-on to its various access products. QOS allows customers to use their own discretion to mark their traffic and assign traffic types to one of several pre-defined queues that prioritizes customer's own traffic. This prioritization is implemented on the US Signal metro and backbone networks using a US Signal set queue structure, however the decision regarding what traffic is given what priority/queue is solely determined by the markings the customer places on their traffic prior to transmission into the US Signal network. This prioritization only applies under US Signal controlled equipment and network infrastructure.

There is no paid prioritization accepted by US Signal for customers to individually prioritize their traffic over other US Signal customers.



### **COMMERICAL TERMS:**

### **Pricing**

Pricing for US Signal's broadband Internet access service is provided on an individual case basis (ICB) due to the numerous customer access options, varying bandwidth (fixed and burstable) and network requirements. US Signal may from time to time offer a promotional price for the port portion of the service. All recurring pricing for the port portion of the service is guaranteed for the length of the service's order term. US Signal cannot guarantee that any access pricing provided through a third party vendor shall be guaranteed due to changes from governmental regulation that may affect pricing. US Signal works very hard to minimize any potential impact on its customers due to changes in governmental regulation. Any customer disconnecting services prior to the expiration of its service's order term will experience an early termination fee equal to 100% of the service's monthly recurring charges for the remainder of the service's order term.

### **Privacy Policy**

Please see www.ussignalcom.com/privacy.aspx.

#### QUESTIONS OR SERVICE ISSUES:

Customers experiencing problems with service should contact US Signal's Technical Operation Center at 888-663-1700 or TOC@ussignal.com. The TOC is available 24x7x365 to assist all customers with service issues, including abuse.

Please direct any general questions or complaints to info@ussignal.com.

#### **UPDATES:**

US Signal may update this Broadband and Network Management document as necessary.