Open Internet Principles of Royell Communications, Inc.

The Federal Communications Commission issued rules to preserve the Internet as an open platform. These rules went into effect on November 20, 2011 and can be found at this link: http://www.gpo.gov/fdsys/pkg/FR-2011-09-23/html/2011-24259.htm. All Internet service providers are required to post information regarding various issues so that consumers, both residential and business, can make informed choices about choosing an Internet service provider. This document contains information regarding our services and in compliance with the FCC's rules. The policies contained herein serve as a supplement to the existing terms of service.

The FCC's rules focus on four primary issues:

- Transparency. Fixed and mobile broadband providers must disclose the network management practices, performance characteristics, and terms and conditions of their broadband services;
- No blocking. Fixed broadband providers may not block lawful content, applications, services, or non-harmful devices; mobile broadband providers may not block lawful Web sites, or block applications that compete with their voice or video telephony services; and
- No unreasonable discrimination. Fixed broadband providers may not unreasonably discriminate in transmitting lawful network traffic.
- Reasonable network management. ISPs may engage in reasonable network management to maintain a high quality of service for broadband Internet access.

Network Practices

ISPs must disclose their network practices, specifically in the four general areas listed below. ISPs may not block lawful content, applications, services, or non-harmful devices, subject to reasonable network management. An ISP may not block consumers from accessing lawful Web sites, subject to reasonable network management; nor shall the ISP block applications that compete with the provider's voice or video telephony services, subject to reasonable network management. ISPs may not unreasonably discriminate in transmitting lawful network traffic over a consumer's broadband Internet access service, although, reasonable network management shall not constitute unreasonable discrimination. The FCC's rules state that a network management practice is reasonable if it is appropriate and tailored to achieving a legitimate network management purpose, taking into account the particular network architecture and technology of the broadband Internet access service.

Congestion Management:

Royell employs 2 different network management methodologies. There are no restrictions, Quality of Service ("QoS") measures, or congestion management deployed on the portion of our network known as VDBnet (Vince Demuzio Broadband network) which is a state of Illinois-funded network.

All other Royell network sites deploy QoS network congestion management. Royell deploys Mikrotik routers at each tower/POP site to handle traffic routing. On these Mikrotik routers we use a traffic management script. Royell believes that this QoS script enables a more robust user experience by preventing an individual user from usurping all the available bandwidth.

Application-Specific Behavior: Royell does not implement blocking or rate-control on any specific protocols or ports. VoIP traffic is prioritized at the customer's location, the tower access point ("AP"), and in the Mikrotik routers. This insures that VoIP packets are forwarded first ahead of all other protocol packets.

Device Attachment Rules: Devices are allowed access to the Royell portion of our network only when their MAC address is entered into our DHCP database by a Royell employee and a static publicly routed IP address is then specifically assigned to that MAC address. Access is controlled on the VDBnet portion of our network by only allowing authenticated CPE to connect to VDBnet tower AP sites. Proper credentials must be entered into the CPE. Once the CPE is authenticated, any device connected behind the radio is dynamically assigned a publicly routed IP address and allowed to gain Internet access.

Security: Royell does not deploy firewalls or other security mechanisms on our network. Each customer must deploy their own firewall or security mechanism on their equipment.

Performance Characteristics

ISPs must disclose the following network performance characteristics:

Service Description: Royell utilizes Cambium equipment for all customer access Point to Multi-point (PMP) sites. The technology used in this equipment allows many customers to simultaneously maintain a robust connection to the Internet. One of the primary reasons is the use of GPS signaling to create a synchronized send and receive of all data packets. Each tower site/ POP has dedicated Point-To-Point (PTP) backhaul radios which connect to the Royell backbone network. The Royell backbone network consists of FCC licensed microwave backhaul radios which connect the Royell NOC with 2 separate Internet egress locations. Each point of egress has adequate bandwidth to route all Royell traffic and thus provides full redundancy for the Royell network.

Royell provides the following speed packages:
768 Kbps down/ 384 Kbps up
1 Mbps down/ 512 Kbps up
2 Mbps down/ 512 Kbps up
3 Mbps down/ 512 Kbps up
6 Mbps down/ 512 Kbps up
6 Mbps down/ 1 Mbps up
10 Mbps down/ 1 Mbps up
10 Mbps down/ 1.5 Mbps up

10 Mbps down/ 2 Mbps up
10 Mbps down/ 3 Mbps up

These speed packages are not available in all areas and are not guaranteed speeds. These are actual provisioned speeds and customers can expect to see speeds up to and exceeding these speeds. In addition to these speed packages, Royell offers customized speed packages with speeds up 50 Mbps down/50 Mbps up. Speed packages even greater than 50 Mbps are available if needed. Latency from customer CPE to the Royell NOC is typically 5-20ms. Wi-Max CPE equipment adds an additional 30-40ms to these times due to the standardized Wi-Max protocol. All customers are able to achieve quality VoIP services with any Royell CPE used on the Royell network.

Impact of Specialized Services:
None.

Commercial Terms

ISPs must disclose the commercial terms of its broadband Internet access service including those listed below.

Pricing:

Residential Pricing (monthly)		
Downlink	**Uplink**	**Price**
768 Kbps	384 Kbps	$19.95
1 Mbps	512 Kbps	$29.95
2 Mbps	512 Kbps	$37.95
3 Mbps	512 Kbps	$37.95
6 Mbps	1 Mbps	$46.95
10 Mbps	1 Mbps	$54.95
Business Pricing (monthly)		
Downlink	**Uplink**	**Price**
1 Mbps	512 Kbps	$39.95
2 Mbps	512 Kbps	$47.95
3 Mbps	512 Kbps	$47.95
6 Mbps	1 Mbps	$56.95
10 Mbps	1.5 Mbps	$64.95
10 Mbps	2 Mbps	$99.95
10 Mbps	3 Mbps	$199.95

Royell has no bandwidth caps or usage-based fees. Various length term contracts are offered which provide further discounts on installation charges and/or recurring pricing. Early contract termination requires a $200 fee. Unlimited free phone support is offered to customers for problems with Internet access, computer and other device issues, and local router and network issues. Technician onsite visits to customer locations to resolve non-

Internet related issues are charged to the customer at a rate of $49/hr. for non-emergency issues. Emergency onsite visits for non-internet related issues are charged at a rate of $99/hr.

Privacy Policies: Royell does not store customer browsing information. Periods of network congestion or network auditing may require detailed packet inspection of customer data. This information is not stored. No traffic information is provided to third parties or used by Royell for non-network management purposes.

Redress Options: Royell provides Tier 1 phone support, Tier 2 technician onsite visits to customer sites, Tier 3 phone support and/or onsite visits by its infrastructure team, and finally if needed, company president involvement to resolve end-user and edge provider complaints, problems, and questions.

FCC Notice
If a customer believes that these open Internet rules are not being met, the customer may file an informal complaint at the Federal Communications Commission. The FCC urges customers to submit any complaints via its website at the following address: http://esupport.fcc.gov/complaints.htm. Customers may also file a formal complaint at the FCC using Part 76 of the Commission's rules.

Additional Disclaimers
The Open Internet Rules, as adopted, and these Open Internet Principles are not intended to affect, alter or otherwise supersede the legal status of cooperative efforts by broadband Internet Access Service Providers and other service providers that are designed to curtail infringement in response to information provided by rights holders in a manner that is timely, effective, and accommodates the legitimate interests of the company, rights holders, and end users. Furthermore, the FCC's Open Internet Rules, as adopted, and this company's Open Internet Principles do not prohibit the company from making reasonable efforts to address the transfer of unlawful content or unlawful transfers of content. For additional information, please review the Acceptable Use Policy.