Vanu Coverage Co. Executive Summary – Northern Maine

Vanu Coverage Co. proposes to meet the broadband data and voice needs of unserved and underserved areas of rural northern New England by deploying a multi-standard wireless network and becoming a wholesale network operator. Our network will have the technical ability to support all last-mile users, regardless of their current or future carrier choice (e.g. AT&T, Verizon, Sprint, T-Mobile). A wireless broadband network serving fixed and mobile customers offers a much more cost-effective means for reaching a greater number of households and businesses in rural areas than alternatives like wired networks. In addition, our wholesale business model that is based on roaming agreements with multiple national wireless operators provides an immediate path to revenue without the high cost of customer acquisition faced by wireless service providers.

Today, many rural towns throughout northern New England have no existing mobile network available for the delivery of broadband data and voice services. Even where wireline broadband services exist in these communities, it frequently is limited in availability and speed. Consequently, rural residents in, and visitors to the area are denied the opportunity to leverage the social and economic benefits of anytime, anywhere broadband communications which Vanu Coverage Co. is proposing.

This unique approach, developed in partnership with the State of Vermont, and extended to Northern New England including Maine, New Hampshire, and Upstate New York, will bring voice and broadband data, to more than 223 rural communities throughout the region including 64 in Northern Maine, where broadband deployments previously have been cost-prohibitive. In addition, this project will make wireless broadband service available to more than 36,510 households and 3,275 businesses. The wholesale business model will give rural residents a choice with respect to the provider, pricing plan, wireless devices and features that meet their needs. Vanu Coverage Co.'s preferred roaming agreements with multiple Tier 1 service providers will give rural consumers a broadband experience superior to any that can be offered in these areas today, with the additional benefit of providing rural residents with full access to the nationwide footprint of national Tier 1 providers' wireless broadband networks. In addition, 676 critical community organizations, public safety entities and community anchor institutions will also have access to broadband and the benefits this network will provide.

Broadband service in a home or business location is desirable, but consumers want more. The growth of "smart" communications devices such as Blackberrys, iPhones, wireless cards for computers and broadband enabled Netbooks is expanding the demand for mobile broadband. Farmers in rural areas will benefit from the ability to get real-time weather, commodities and market information at home, in the fields or on the road. Visitors to the region's vast recreational attractions will benefit from having broadband voice and data services. In the event of a medical emergency, Vanu Coverage Co.'s network will enhance public safety's ability to be notified quickly and respond with appropriate support. First responders can then connect with medical specialists located anywhere using available mobile healthcare applications which can monitor and convey critical patient vital statistics in real-time.

In order to successfully act as a wholesale operator to all interested service providers, the proposed network will initially deploy a wide range of 3G radio standards including GSM, GPRS/EDGE, CDMA2000, UMTS, HSDPA/HSUPA and 1xEVDO Rev. A. The network will be upgradeable to support LTE. Our overall network will cover a substantial footprint in rural Maine, New Hampshire, Vermont and Upstate New York, with [redacted] sites in this proposed network. Funding to construct and operate the network as it becomes profitable will come from a variety of sources, including venture capital equity investments, loans from the Vermont Telecommunications Authority and if approved, loans from the RUS Broadband Initiatives Program proposed in this application.

Once the HSUPA radio standard phase has been rolled out in the proposed Vanu Coverage Co. network, consumers will have access to peak speeds of 7.2 Mbps downlink and 5.76 Mbps uplink. Since Vanu Coverage Co. proposes to operate a wholesale network to Tier 1 retail wireless operators, the tremendous variety and choice these providers deliver with respect to, access to the internet, value added services and other forms of content, including video, will be available to rural subscribers to these services as soon as the network is operational.

The proposed wireless network will operate in the 1900 MHz PCS frequency band. The applicant has obtained long-term leases for 30MHz of PCS Spectrum in the proposed service area and anticipates obtaining additional spectrum leases covering the service area to address the expansion of service offerings. These spectrum leases provide the applicant with the right to use the spectrum in the service area. In addition to spectrum leases, the applicant has and will enter into secured preferred roaming agreements with Tier 1 operators, creating a predictable source of wholesale revenue for repayment of debt and future expansion.

The applicant will adhere to the guidelines of network openness described in the BIP NOFA. The core network has been designed to provide end users with access to the public Internet via the applicant's service provider customers. Nothing in the wholesale network infrastructure will prevent these service providers from offering lawful Internet content of the end user's choice. The proposed network architecture will enable greater choice in user devices because of its multi-standard nature. Vanu Coverage Co.'s wholesale roaming business model will encourage multiple Tier 1 retail operators to compete for customers within our service areas. This competition, combined with Vanu Coverage Co.'s cost-effective wholesale rates, will encourage Tier 1 retail operators to support retail points of presence, invest in marketing and customer education and awareness, and extend next generation devices and national service plans to rural areas.

The Vanu Coverage Co leadership team consists of proven, wireless industry veterans. Their combined knowledge and experience covers functional areas from research and development – to network operations and deployment – to marketing and sales. Past accomplishments include a nationwide deployment of the first WiMax network, the development and launch of strategic B2B and B2C marketing plans responsible for Sprint Nextel's $30 billion in annual wireless subscriber revenue, the development of the first U.S. Federal Communications Commission (FCC)-certified software-defined radio, and the deployment of the nation's first dual-mode (GSM and CDMA) wireless network.

Vanu Coverage Co. is led by Tom Kelly. Prior to joining the company, Tom served in several executive roles at AT&T and Nextel Communications. Notably, as Chief Operating Officer at Nextel, Tom led Engineering, Operations, Sales, Product Development, and Marketing. Vanu Coverage Co's Senior Vice President of Network Operations, Doug Smith, was previously responsible for Sprint Nextel's nationwide deployment of the nation's first WiMax network. Under his guidance, more than 3,000 sites were constructed within a 12-month period. Prior to his leadership of Sprint-Nextel's WiMax business, Doug was VP of Network Engineering where he was responsible for a team consisting of over 1,500 employees with responsibility for Sprint's wireless networks consisting of approximately 65,000 iDEN and CDMA cell sites supporting over 54 million subscribers nationwide.

Vanu, Inc. has deployed and provides support to several wireless networks throughout rural North America. Notable examples include, Mid-Tex Cellular and GCI Wireless. Mid-Tex Cellular uses the Vanu Anywave® product to offer GSM and CDMA voice and data service to subscribers and roamers over an 8,000 square mile area covering about 100,000 POPs in central Texas. GCI Wireless is rolling out GSM/EDGE service throughout Alaska, with Vanu Anywave RAN components being deployed to hundreds of rural villages. These highly remote territories, often accessible only by seaplane, are getting wireless voice and data service for the first time.

The overall infrastructure cost of the proposed project is [redacted]. Due to our unique wholesale operating model, which benefits from Tier 1 operator participation, available devices and services, and distribution leverage, Vanu Coverage Co. will drive accelerated broadband subscriber penetration beyond levels that can likely be achieved by a new retail wired or WISP entrant. We project there will be [redacted] broadband subscribers by the end of 2014.

This project will contribute to job growth in the region in several ways. Using an estimated employment multiplier derived from the Bureau of Economic Analysis for telephone and telegraph apparatus (17.2278) and for communication equipment (18.9885), it is estimated that for every one million-dollar increase in the final demand for communications and telephony equipment, 18 new jobs will be created. Therefore, our project would produce [redacted] new jobs. In addition, an analysis of the of the number of businesses in served versus unserved / underserved census blocks in Northern New England determined that served census blocks have an average of 22% more businesses. Assuming these small businesses average 2.5 employees, our project will create 2851 additional jobs.

Vanu Coverage Co is well positioned to readily deploy and manage the proposed wireless broadband network and bring the same service to rural unserved and underserved areas in northern New England.