Broadband USA Applications Database

Applicant Name: ALPHASTAR AMERICA, LLC

Project Title: BUILDING THE FIRST STATEWIDE BROADBAND TELEHEALTH NETWORK IN CONNECTICUT

Project Type: Comprehensive Community Infrastructure

_________________________ Executive Summary ______________________

An American Telemedicine Association profile for Connecticut showed the state had no state-wide programs involving telemedicine, the provision of health services using high speed broadband infrastructure. Furthermore, there is a rapidly increasing amount of digital health-related data collected and exchanged. For example, "a single video consultation session can require a symmetric 2 Mbps connection with a good quality of service. Similarly, EHRs and medical imaging require broadband support. Over the next decade, physicians will need to exchange increasingly large files as new technologies such as 3D imaging become more prevalent. This project is an attempt to fill in this gap. Alphastar America proposes to construct the first ever state-wide telehealth network in Connecticut that would serve all eight of the state's counties and involves 169 communities with population of 3,462,478, including 98 rural and 72 non-rural communities, all of which are underserved. The project will serve 900 healthcare providers and when completed will pass 1,284,044 households and 103,454 businesses according to information provided by the State of Connecticut. It will pass 839 anchor institutions. A telehealth network is purely a system for distributing and circulating electronic data and images. Therefore, services will be classified by level of access to communicate with and exchange data with other facilities within the network which will include: 900 healthcare providers in 169 communities; first responders and public safety agencies, municipalities, mobile and/or fixed medical clinics at schools, Indian reservations, college, community colleges, and at nonprofit and for profit companies and organizations; patients at their homes and communities; Insurance companies and brokers and financial and other institutions specializes in healthcare; vendors, suppliers and healthcare support businesses; and regional, national and global healthcare providers and medical research centers. AA will also offer data and image back-up, storage, duplication; server collocation; and virtualization and cloud computing solutions; disaster recovery assistance for healthcare providers, including business continuity preparation and procedures, servers or mainframes restoration, private branch exchanges (PBX) or provisioning local area networks (LANs) recovery. AA will utilize the Network operations center to maintain high quality of service and compliance with the HIPAA laws. AA will make special services available, on demand, such as VOIP, VOD, VPN, Streaming of video and audio to hospital patients; Distance education "including continuing medical education, grand rounds, and patient education; Nursing and medical professional call centers; Administrative uses including meetings among telehealth networks, supervision, and presentations; Research on telehealth; online information and health data management; transformation from" 911 emergency; Healthcare system integration; Expanding the frontier" of mobile telehealth via wireless and/or mobile satellite; asset identification, listing, and patient to asset matching, and movement; overall healthcare system management ; patient movement
and remote admission; transmission of medical images for diagnosis, Groups or individuals exchanging health services or education live via videoconference (real-time telehealth); Transmission of medical data for diagnosis or disease management (sometimes referred to as remote monitoring); Advice on prevention of diseases "and promotion of good health by patient monitoring and followup; and Health advice by telephone in emergent cases (referred to as teletriage). AA will engage and support nondiscrimination and interconnection obligations of the NOFA and incorporate those provisions in its business practices. A management team member will be responsible for ensuring access to the network by those wanting to be connected to the State of Connecticut’s healthcare facilities within the limitations of federal and state privacy laws like HIPPA. Alphastar America is in a perfect position to build a CT telehealth network immediately and economically (please see affiliate's website www.alphastar.com) "AA operates a unique FCC licensed telecommunications facility in Connecticut. The 12-acre facility is situated atop a mountain and contains a 20,000 SF building expandable to 300,000 SF." As part of President Reagan"s "Star Wars" program, it is solidly constructed to withstand a bomb, fenced with two sources of electric power, a generator, USB, high ceilings, elevated floors, climate control and advanced security. Currently the facility contains a major fiber hub, a fixed and mobile satellite teleport, a data center and a dual Network Operations Centers (NOC) for Internet and video. AA uses these various technologies separately, jointly, in parallel and/or in reverse. AA's network was designed initially Cisco Systems in 2000 and deployed nationwide. In 2009, Cisco upgraded the designs for this project. The facility has two redundant fiber optics connections plus cable TV fiber access, a Microwave system and direct satellite access to most of the globe. It operates a fixed or mobile satellite per FCC rights on C, Ku, Ka bands. The recently added medical data center is capable of storing, archiving and retrieval of multi-media including data, images, audio and video either as a co-location or managed services with virtualization solutions. A major Internet and video Network Operations Center (NOC) is also included. The NOC was used to operate and monitor broadcasting of 500 TV channels and numerous radio stations. It will monitor the network to ensure QoS (Quality of Service) and compliance with HIPAA privacy laws. For healthcare providers and first responders, the facility will offer disaster recovery assurance in case of man-made or natural disaster and business continuity in case of intentional or unintentional work interruptions. AA will build a secure, encrypted, scalable and replicable telehealth network with access to Internet2 and"National Lambda Rail (NLR) research networks"for more bandwidth and reach. FCC license and zoning permits are grandfathered and represent a high barrier to entry. " " While Alphastar America will be a new company, some of its principals were a part of the operating facility and associated businesses that have been in existence since the 1980s. The 2009 Cisco Systems upgrade of the facilities were constructed to work in the healthcare field to enhance redundancy in power and connectivity, security and meet the legal requirements of HIPAA privacy laws. AA is in discussion with a group of prominent physicians and healthcare providers to join an Medical" Advisory Board to guide the network in healthcare broadband" applications. Please see attachment from eHealthConnecticut, Inc. CT. AA has reached an agreement with a network management partner to manage the NOC and the data center on fulltime basis when funds are available."(http://www.precisiongroup.com) Precision Group has been involved in the construction of both the data center and the Internet NOC for eight months as Cisco System resellers and their headquarters is within miles from AA facility. AA"s management team is a group of seasoned professionals in business development, marketing, finance and technology as shown in the resumes
attached The project will be sustainable by the mere fact that it will the first of its kind and initially will be the sole provider of the services and access state-wide. In addition to the health facilities within the state looking to connect to one another, the network will be available to non-public entities within the limits of HIPAA and other privacy laws of course. Further, the Rural Health Care Program, funded through the Universal Service Fund, will enable public and nonprofit healthcare providers to take advantage of the 25% discount on the monthly Internet access access via the Internet Access Fund It is project to have 900 healthcare anchor institution as subscribers. It will serve as a focal point for most of the anchor institutions in 170 communities in CT. It is estimated that this project will employ 300 persons within three to four months of funding. Alphastar will seek to fill positions by recruiting from the areas of the state with the highest unemployment." Further the project can help "create another 900 at the healthcare facilities totaling 714 direct jobs and potentially 1000 indirect jobs because of the creation of heathcare business that would follow. The telehealth network will encourage and stimulate the growth of telemedicine, telepharmacy with added jobs and professionals. In Connecticut, the project"will assist the town of Oxford CT to revitalize an industrial park where AA facilities are located with high unemployment rate.