Broadband USA Applications Database

Applicant Name: NTCH, Inc.

Project Title: NTCH (Cleartalk) Central Tennessee Broadband Wireless Last Mile/Middle Mile application

Project Type: Last Mile Non-Remote

_______________________ Executive Summary ____________________

a. Opportunity: This NTCH (Cleartalk) Wireless Infrastructure application addresses the opportunity to utilize and expand an existing cellular tower network to bring high speed mobile broadband to the counties in Middle Tennessee that are underserved and south and west of Nashville. This area is contiguous to the areas Cleartalk currently operates in West Tennessee and Alabama. This proposed service area will be contiguous and operate together with Service areas we have applied for funding for in West Tennessee and Alabama and together with these areas and the adoption plan we have promoted for these areas Cleartalk will be able to effectively accomplish all the purposes of the ARRA Broadband funding program for the 197,203 people living in the 100% rural service area we have proposed.

b. Service Area: Cleartalks proposed Service Area covers 10 counties in Central Tennessee East of the Mississippi River and West and South of Nashville and a line made up of the I24 and I65 freeways. Income demographics of this Service Areas average $29K-$32K per household which is below the annual state average and far below the federal average. The counties in our Service Area suffer from unemployment averaging over 15.7%, a rise in unemployment of over 5.25% in the past year alone. The average Broadband adoption rate in these counties according to the connected Tennessee web site is only f 23.7% or about 1/3 the national average.

c. Households & Businesses: Census.gov has identified 8,355 businesses in the Service Area by County, and 93, 282 households in the Service Area by County.

d. The service area we will cover will pass 986 Community Anchor Institutions, including 89 Public Safety entities, 372 Health Care providers, 21 Libraries, 115 Schools, and 385 critical Community facilities.

Almost every county has an industrial park (with varying degrees of activity today), and construction has begun on a central Tennessee industrial Megasite near Clarksville which this project proposes to serve.

e. Proposed services and applications: Cleartalk seeks funding to deploy a network of shared communication sites, the latest advancements in Software Defined Radios with a path to 4G/LTE, and an open wholesale and network structure that will foster competition in the Service Area. Highspeed broadband over the EVDO Rev A 3G standard will be provided with speeds in excess of 2.5mbps down load and 700kbs upload. This service will be available both fixed and mobile. The budgeted cost per unlimited usage (subject to the fair sharing provisions set forth below) will be $35 per month per access point. CPE required to provide this service on desktop computers are industry standard and used by two of the nation’s four largest telecommunications carriers. They range in cost at a wholesale level from $28 (EVDO rev 0 device capable of only reduced speed) to $99 USB EVDO Rev A device. In addition and together with the companion applications mentioned above, netbook computers purchased from suppliers such as Dell in Tennessee will be made available for access to health care and public safety
agencies, and we anticipate they will be checked out for use by schools and libraries within the funded service area of the applicant. (f) Non-discrimination and interconnection - This network will abide by the FCC's Internet Policy Statement (FCC 05-151) and the requirements of the NOFA; policies and arbitration provisions concerning non-discrimination and interconnection will be posted on the applicant’s website. See question 22. (g) Network type and description- Cleartalk has proposed a 3G mobile CDMA EVDO Rev A network that is considered best in class and is the same network currently deployed by Verizon wireless. The structures to deploy this network will be largely newly built.. Cleartalk is the first company to deploy the a software defined radio network on and all IP backhaul network as proposed however this path is currently being followed by all the major wireless carriers. The deployed base stations deployed can provide a single platform to deploy CDMA, GSM, HSDPA, EVDO as well as the 4G technologies that have been chosen by the major carriers, WiMAX and LTE. These radios will also accommodate deployment of a long planned public safety interoperability network at 700 MHz. These are split architecture base stations which use fiber instead of coax to carry the signal up the tower, and the latest antennas. In our existing markets we are experiencing up to a 5 db improvement in RF performance and which expands coverage on a given site up to 5 miles farther than the traditional networks.. NTCH/Cleartalk’s last mile network is enabled through a softswitch core and software-defined base stations manufactured by ZTE, a worldwide technology company doing over 8 billion in annual sales. These base stations will be matched for backhaul and for our middle mile deployment with native IP backhaul radios from Trango Systems, Inc., a Poway, California-based manufacturer with proven performance in some of the most difficult environments operated by Cleartalk. Middle mile service will use a combination of microwave backhaul and fiber networks. Clear Talk will choose aggregation equipment that works best with the fiber networks it is able to negotiate the best rates and service quality with. This open network will enable broadband any time, any where to those who can't access and/or can't afford high speed internet access. (h)Qualifications: The team making this application has a 15 year history of deploying networks for both large and small carriers and is responsible for some of the most timely deployments ever done, a 10 year history of operating telecommunications networks- including high speed data networks in rural areas, and a good track record of working together with small companies and government entities in the multiple states where they operate. When taken as a whole, this application provides for the least cost to reach the most people and meet the goals of the ARRA. (i) Infrastructure cost: The total deployed system cost including Switching platforms, 132 Towers and the radio access and backhaul equipment is $51,085,000 , we are seeking grant funding of $25,031,650. (j) Projection numbers: Conservatively, we expect subscribership of- Yr 1 2.2%, Yr 2 4%, Yr 3 5%, Yr 5 5.6% of covered population of 197,300 persons. We project that at the end of the three year funded period that our subscribers will be 6,905. . (k) Job Creation Potential: Connected Nation’s website estimates that Economic Stimulus Spending throughout Tennessee would produce 49,142 jobs plus increase productivity for employed persons. Mathematically, this suggests job creation from the build out in our Service Area of 1,577 jobs.