Broadband USA Applications Database

Applicant Name: GENOA SERVICES

Project Title: Broadband Enabled Remote Guidance Systems For The Visually Impaired ("InSight Platform")

Project Type: Sustainable Broadband Adoption

_______________________ Executive Summary _______________________

Innovative Proposal 'Provide Remote Guidance Services For The Visually Impaired: Genoa and Rotary intend to launch a nationwide broadband ('BB') enabled remote guidance system ('Genoa InSight Platform') serving the visually impaired (a large BTOP vulnerable population). The program will be available in all communities, including unserved and underserved areas, and encourage BB adoption amongst the blind and visually impaired (a demographic that has yet to take full advantage of the BB revolution) and home bound (e.g. physically disabled) 'remote guides' or 'virtual guides' who can lend their sight to assist the blind and visually impaired (the 'beneficiaries') and who can perform these community services from their own home computers. The platform utilizes a wireless 3G, head mounted webcam and audio array worn by the visually impaired beneficiary, with the resulting live audio+video streamed to a sight enabled virtual guide located anywhere in the U.S. who is able to remotely talk the visually impaired beneficiary through a particular activity (grocery shopping, checking food expiration dates, travel, etc.). In addition to providing the nearly 20 million visually impaired persons in the U.S. with a means of undertaking a variety of everyday tasks, the platform will also serve as the cornerstone for a nationwide, high-caliber virtual guidance call center network that can create long-term, high value employment for many thousands of homebound disabled persons (e.g. wheelchair bound or otherwise physically disabled). Genoa is partnering with the Rotary Club of San Francisco to build a platform that can be effectively rolled-out in communities across the country leveraging upon the 7,840 local Rotary clubs made up of 368,145 Rotary members who can assist with the training of the visually impaired persons wearing the 3G enabled webcam headset as well as train the homebound virtual guides. Together the two entities are prepared to collaborate to deploy this innovative system over a 24 month time period and make these devices available to tens of thousands visually impaired persons and employ a large group of disabled, BB-based, home bound virtual guides. As for technology proficiency, Genoa is currently working with Logitech, the leader of BB enabled webcam, video calling and audio headset solutions and has also received support form Plantronics. Similarly, the InSight platform will leverage the expertise of LiveOps, the leading provider of on-demand contact center software for virtual call center outsourcing with at-home agents for inbound and outbound calls and has considerable experience implementing systems for home bound disabled personnel. Addresses Significant Problem: The U.S. lags far behind other industrialized nations in both the availability and affordability of BB enabled webcam and distributed call center capabilities. This in turn limits much of the value generation potential relating to telemedicine, distance learning, remote job training, and other online activities that are typically enabled through BB webcam technology adoption. As such, the InSight platform will
encourage BB users to interact using mobile webcam technologies and facilitate the growth of online functionality (the sight enabled assisting the sight impaired), as well as further additional telemedicine, distance learning, and remote job training activities across BTOP vulnerable population in unserved and underserved communities. Applicant Qualifications: Genoa is the leading innovator in remote guidance systems for the blind and has pioneered the use of off-the-shelf technologies for this purpose. Rotary is the leading community-based volunteer organization with over 1.2 million members worldwide. Together, the two entities are uniquely positioned to deliver on the InSight platform due to the fact that Genoa has the technical web-cam and remote guidance experience for the visually impaired and Rotary has the ability to project this BB technology delivery and expertise throughout its many thousands of U.S. volunteers. In addition, the project can expect the support by Logitech International, Plantronics, and LiveOps, each a world leader in its field. Scalability & Sustainability: In terms of user scalability, the platform will demonstrate how a significant number of the 21.3 million home bound disabled persons in the U.S. can work as virtual remote guides for the visually. Specifically, this project estimates that 288 'full time equivalent' home bound workers will be employed in addition to the 18 FTE engineers and support staff to be hired by the technology team (306 jobs total). An additional strength of the InSight platform lies in its ability to draw such virtual guides into the program for relatively short periods of time and at variable intervals (again, making this type of employment ideal for disabled home bound persons). This ability to work on short notice for 'a half hour here, and a half hour there' and do so from home allows employment for persons from all walks of life to partake in 'flex-employment' via their BB connections irrespective of their background, training, or financial status. Further, individual guides can assist the visually impaired located anywhere in the U.S. -‘not just those in their immediate community. Given the large number of persons in the U.S. who would work if they could do so in a more manageable, virtual, and remote fashion, the platform has the ability to pull in potentially far more participants than other traditional employment opportunities that require a larger time commitment and physical presence of all the parties. As for the scalability of the visually impaired beneficiaries, the InSight platform will provide its web cam technology to the market for free, allowing manufacturers to produce and supply the blind users at the lowest possible cost (even before Medicaid, Medicare, and insurance reimbursements). Further, Genoa will make the remote guide service available for $100 a month (again, much less expensive then a home care worker visit to assist the blind person). In terms of total market demand and the ultimate sustainability of the project, it is estimated by the American Foundation for the Blind ('AFB') that there are approximately 20 million Americans who could benefit from the platform. Serving Vulnerable Populations: Among this pool, many beneficiaries would also be members of other BTOP vulnerable populations in that they are aged (6.2 million sr. citizens are visually impaired), low income (5.7 million visually impaired have family incomes of less than $20,000 per year), or have limited educational experiences (4.5 million visually impaired have less than a high school diploma). Program Cost & Job Creation: As a leading community-based volunteer organization, Rotary is uniquely positioned to deliver on the Genoa promise of BB enabled remote guidance for the blind. As such, we expect to see accelerated rollout of remote guidance system solutions in the U.S. (e.g. both Logitech and LiveOps solutions and as well as compatible non-Logitech/LiveOps systems) and have estimated that an addition 97 jobs will be created as a result (bringing the total direct, indirect, and induced jobs created to 409). In addition, the cost of our program will run approximately $5.75 million with $2.26 million requested from NTIA and the remaining $3.48 million provided by Genoa and
partners as 'match' over the life of the project. By linking the visually impaired with a large pool of remote guides via a network of mobile webcam and audio peripherals, the program can also facilitate other types of remote activities - including distance learning, job training, and telemedicine. As such, the platform will support use by vulnerable populations (low-income, unemployed, aged, etc.) in served, unserved, and underserved areas and by public safety agencies (enhanced emergency response capabilities). Innovative Approach Generating Extraordinary Results: In sum, this innovative platform will (i) empower those with vision impairments to greatly expand their range and utility of their activities without meaningful cost to society; (ii) create 306 'shovel ready' jobs across the country (engineers, software developers, administration, virtual guides); (iii) add an estimated 8,233 additional BB users nationwide (virtual guides and visually impaired beneficiaries); (iv) dramatically increase the level of volunteerism in the U.S. (e.g. Rotary training services); (v) lower the access costs (BB access, hardware, software) for users of all telepresence; (vi) spur the adoption of telemedicine, job training, distance learning activities; and (vii) enable public anchor institutions (school, hospitals, community centers) and public safety entities to better manage and respond to the needs of the blind population.