Broadband USA Applications Database

**Applicant Name:** SOCKET MOBILE, INC.

**Project Title:** Mobile Broadband Health Platform

**Project Type:** Sustainable Broadband Adoption

__________________________ Executive Summary __________________________

The Problem: As a general matter, the U.S. lags behind other industrialized nations in the availability and affordability of broadband ('BB') due to the significant lack of high value applications and equipment that deliver compelling affordability, high utility, exceptional ease of use, speed, and true cross-platform functionality. Should the U.S. government foster and develop a next generation family of high-impact applications — including those for BB enabled healthcare, the demand for BB services will markedly increase across all strata of society, reaching the most remote geographic regions and disenfranchised demographics. Innovative Proposal — The 'Mobile Broadband Health Platform': Socket Mobile, Inc. ('Socket Mobile') proposes to develop, launch, and maintain the 'Mobile Broadband Health Platform' ('Platform') — a low-cost, secure, scalable, customizable, and highly effective BB healthcare delivery platform that allows any healthcare provider or supporting administrative agency (insurers, anchor institutions, etc.) to deliver superior remote healthcare services to members of the public located anywhere and do so in a manner consistent with the standards expected in a non-remote (hospital, clinic) environment. To launch this platform and an associated software development kit (SDK) for developing remote medical applications, Socket Mobile will partner with the University of California - Wireless Internet Information System for Medical Response in Disasters (WIISARD), and potentially the CDC, VA Hospitals, and the U.S. Army Telemedicine and Advanced Technology Research Center (TATRC), to whom Socket Mobile intends to license the SDK on a perpetual and free basis, thereby ensuring that U.S. taxpayers get value for their investment from day one of the project. This Platform will consist of three main components: (1) a Medical PDA mobile computing and BB communications device customized for remote point of care healthcare applications; (2) a HealthScan automatic identification device (e.g., barcode scanner / RFID reader) that attaches to popular third-party smartphones (e.g., Apple iPhone, RIM BlackBerry) and enables remote healthcare providers to comply with industry standards and best practices that leverage automatic identification technology to improve patient safety, ensure patient confidentiality, and increase operational efficiency; and (3) an application and developer communication server that provides third-party healthcare applications for the aforementioned devices coupled with a software development kit that allows third-party developers to easily create mobile healthcare applications that integrate Socket Mobile automatic identification technology with support for leading cloud computing-based personal health data systems (e.g., Microsoft HealthVault, Google Health, Dossia). Currently, doctors and other clinicians have two basic choices in terms of handheld platforms for remote healthcare diagnostic, documentation, and prescription activities. The first is the typical 'smartphone' running a 'thin client' healthcare software application. Such a device can assist with basic remote diagnostic and documentation functions (e.g.,
charting patients' symptoms during home health check-ups), but do not approach the level of computing, automatic identification (e.g., barcode scanning, RFID) and networking power associated with devices to be found in the non-remote medical environment (the departmental station within a clinic). The second choice available to medical personnel performing remote health services is a purpose-built, handheld medical device that is essentially a portable version of a computer workstation to be found within the non-remote environment. This type of device closely approximates many key functionalities of a non-remote device, but only at considerable cost (perhaps $10,000 to purchase, with significant maintenance costs). There does not exist a BB-based device and database platform that serves the key middle ground in these two approaches - a device has the affordability and scalability of a smartphone yet the power and functionality of the purpose-built handheld medical device. The Platform is designed to fill this gap, providing a BB-enabled solution where healthcare providers can take Socket Mobile’s Medical PDA or popular third-party smartphones enhanced with Socket Mobile HealthScan automatic identification devices, combine them with third-party healthcare applications developed from the Socket Mobile SDK and distributed through the Socket Mobile application and developer communication server, leverage personal health records from a secure 'Cloud Computing' back-end database environment, and enable a telemedicine and healthcare management system that can readily be used by healthcare professionals in the field (anywhere, anytime functionality), with minimal training, and best results (accuracy, security, speed). In doing so, the Platform can bring better medical care to people who cannot travel to traditional venues (hospitals, clinics), lower the need for many of these medical facility visits (again, lowering facility and insurance costs) by performing much of the diagnosis and recordation remotely (on-site of patients' work, home, community center, bedside visits), and providing a tool which healthcare professionals can use to better manage daily medical data processes by not being limited to a particular location relating to a particular data management exercise (recordation, diagnosis, and prescriptions), while still complying with industry standards and best practices for these activities. Solution Addressing BTOP Purposes & ARRA Goals: The Platform serves BTOP Statutory Purpose populations (unserved and underserved areas, public safety, anchor institutions, and vulnerable populations) due to its enablement of fast, effective, and paradigm shifting telemedicine, public safety communication, and job training activities. As such, the Platform can be a high-impact contributor to the development of local and national BB markets as well as serve several broader national goals set forth in ARRA (i.e., 'to preserve and create jobs and promote economic recovery', 'to assist those most impacted by the recession', 'to provide investments needed to increase economic efficiency by spurring technological advances in science and health.'). Given the call to action by our President to create jobs and revitalize the economy in an accelerated and sustainable fashion, we believe our Platform is well-suited to NTIA BTOP support due to its: (i) credible management team; (ii) transparent organizational structure (NASDAQ listed company) (iii) track-record in delivering innovative technologies in prior markets; (iv) its ability to hire 25 employees ('shovel ready'); (v) focus on BB market enablement and BB related job growth; (vi) induce the creation of 122.4 BB enabled telemedicine jobs (mostly in the data recordation services sector); (vii) induce 742,068 new BB users to adopt and use BB services (e.g. remotely enabled patients); and (viii) focus on serving BTOP priority populations. Applicant Qualifications: Socket Mobile will make for an exceptional custodian of taxpayer funds as the team has considerable experience in technology development and has already delivered successfully on similar technology projects. Of note, the executive team of Kevin Mills (CEO), Michael Gifford (Founder / Exec.
VP), and David Dunlap (CFO) are well matched to the task of managing a high growth and high impact BB platform and have held leading management roles in public and private companies such as Logitech, Inc., Mountain Network Solutions, and Deloitte and Touche, and have a track record of taking new and innovative ideas and transforming them into market leading technology platforms. Socket Mobile has already facilitated the rollout of diverse healthcare applications by launching several medical mobile devices and partnering with leading software developers and integration experts who specialize in mobile healthcare. Of note, the company has enabled healthcare providers to: 
' Expand access to medications to elderly, low-income, and disabled patients as well as families with young.
' Prevent medication errors and save patients’ lives by enabling nurses to automatically verify patient identity and medications directly at bedside with a handheld barcoding and RFID application.
' Streamline documentation and improve access to patient records for senior care facilities.
' Improve effectiveness of medical first responders by documenting triage status and managing field care with portable barcode scanners.

Reasonable Program Costs: Socket Mobile envisions the project costing $5,771,334 to finish, with completion within 18 months. Of this amount, Socket Mobile is requesting that NTIA contribute $3,858,038 and Socket Mobile providing a 33.15% 'match' in cash and in-kind.