

## Internet-Delivered Services & Support in Remote & Rural Areas

For over fifteen years MetroLink Solutions, Inc. has focused on providing wireless broadband access, and Internet-delivered content, to underserved markets of Latin America, Africa and the Middle East. As part of this effort, MetroLink supports three social responsibility programs: **SchoolWeb™**, **HealthWeb**, and **CommunityNet**. Each is comprised of a portfolio of products, applications and services designed to dramatically improve the lifestyles of people residing in rural and remote areas of emerging markets.



**SchoolWeb™**, with the mission of providing educational development and a positive learning environment, for students in rural and remote areas, which greatly surpasses any opportunities currently available to them. **SchoolWeb™** includes:

- **Internet Access:** the design and implementation of advanced wireless broadband networks in schools and learning centers
- **Educational Content and Applications:** high-speed Internet distribution of leading-edge educational media and resource tools
- **EduPlex Educational Facilities:** the deployment of modular school, administration and support facilities, employing the latest in alternative power, water treatment and energy efficiency.

**HealthWeb**, focused on bringing the benefits of advanced medical care, normally available only in large city health centers, to rural and remote areas. The **HealthWeb** package includes:

- **Wireless Internet:** high-speed Internet access in clinics and doctor's offices, supporting remote triage and diagnostics, telemedicine, professional development and continuing education
- **MedPlex Medical Facilities:** the deployment of state-of-the-art modular clinical facilities equipped with modern diagnostic tools, alternative power sources, water filtration and waste treatment
- **Advanced Healthcare:** working with humanitarian groups and international agencies to provide the poor and underprivileged access to medical procedures and effective medication normally unavailable to them.

**CommunityNet**, a program emphasizing economic development, social sustainability and lifestyle improvement in rural and remote regions. **CommunityNet** includes:

- **Rural Internet:** developing Internet cafes and call centers in areas where such communications is limited or non-existent

<sup>1</sup> These efforts were undertaken, beginning in 1995, by MetroLink's predecessor, ETS Global, Inc.

- Adult Learning & Training: creating and distributing media (in native languages) that supports vocational education, literacy improvement and adult learning
- Mobile Commerce: providing the means to conduct secure financial transactions using cellular and wireless facilities.

When these programs are combined into a comprehensive social responsibility effort, they produce life-changing benefits in education, health and social sustainability that are without peer in emerging markets of the world.

MetroLink is well-equipped to undertake these programs, having a number of critical elements at its disposal including:

- Extensive experience in the design, construction and operation of low-cost, yet highly reliable, wireless broadband networks in emerging (and many times volatile) markets of the world
- Key relationships with leading technology companies, providing the enterprise with equipment, engineering expertise and proprietary software under revenue sharing arrangements, or at significantly reduced rates
- Access to highly desirable video, voice and data applications and content that can be specially packaged for distribution over MetroLink's wireless broadband networks
- Strategic alliances with well-positioned in-country partners, having established governmental relationships, and the cultural acumen to successfully conduct business on a local basis
- The demonstrated willingness of key government leaders, in virtually all parts of the world, to participate in the 'politically advantageous' *RuralWeb* wireless broadband Internet program.

### Program Underwriting- Who Pays for It?

These programs have been well-received by 'politically astute' government leaders, including offers to grant licenses and award valuable spectrum free-of-charge to MetroLink in return for providing Internet-delivered content and applications to schools, medical clinics and rural communities. However, as is many times the case in a developing country, governmental support rarely extends to financial contributions to the program.

The ability to raise capital for a program of this nature, especially in developing countries, is a challenge. For example, discussions with international aid agencies and charitable foundations have produced dubious results. This is primarily because the enterprise is not purely charitable, but also has a 'commercial' aspect. Conversely, it has been difficult to generate private or institutional investor interest in the commercial nature of the enterprise, due in large part to the altruistic 'overtones' of the program. For the past five years the question has been: "Who is going to pay for it?"

### The Answer

Earlier this year this question was answered when MetroLink identified a source of funding that fits perfectly with the company's wireless broadband strategy. The sources of funding are the mining and energy companies doing business in developing countries. The reason is simple. In virtually all

emerging markets, a mining or energy company must, among other things, satisfy certain 'social responsibility' requirements as part of the granting of concessions to search for and remove mineral or oil resources from that country. Very often, this requirement extends to building and equipping schools or medical clinics, or undertaking similar 'life improvement' programs, in the region where the company is active. Such programs can easily cost tens of millions of dollars annually. One company, in Peru alone, spent over twenty-six million dollars in social responsibility programs over the past year.

The MetroLink **RuralWeb** rural Internet program is a valid alternative for such activities. In addition, it provides a mining or energy company with these added advantages:

- MetroLink assumes all development and operational responsibilities, allowing the mining or energy company to concentrate on its core business.
- Due to MetroLink's excellent governmental relationships, the mining or energy company is provided a high level of 'goodwill' that can greatly enhance its own lobbying efforts.
- **RuralWeb** is geared to 'self-sufficiency', providing a resource company a supplemental revenue source to reinvest in social responsibility programs in successive years.

The response from the mining and energy sectors has been very positive. A pilot project in Latin America is currently planned for mid-2011. Upon successful implementation of the pilot project, the plan is to expand the program to mineral and oil resource producing countries in the Middle East, Africa and Latin America.

## The MetroLink Initiative

MetroLink is dedicated to the proposition that the benefits of a good education, adequate healthcare and life-improvement opportunities should be available to all. Too often however, this has not been the case. This is particularly true for people living in remote, rural or underserved areas. Traditionally, these people have been provided with educational, medical care and life-improvement opportunities a tier or two below those available to their metropolitan or suburban counterparts. MetroLink pioneered distance learning and telemedicine to locations throughout the United States by providing a full range of curriculum-based educational and medical programs by satellite and Internet<sup>2</sup>. From this past experience, MetroLink has developed a cost effective, quickly deployed, satellite/wireless 'hybrid' broadband system that can support Internet services in the remotest of areas. The rural Internet service is based on a unique multi-tier wireless broadband concept that has been developed by MetroLink.

## The MetroLink Multi-tier Wireless Broadband Network

The mission of MetroLink is to design, deploy and operate wireless broadband networks in emerging markets of the world. By employing a unique wireless broadband design and a cost effective migration strategy, coupled with innovative and highly desirable content-based services, MetroLink provides telecommunications services on a scale never before available to many locations in the world. MetroLink employs a proprietary multi-tier broadband wireless concept that integrates a number of wireless broadband equipment and support systems into a seamless network. This

<sup>2</sup> These efforts were undertaken, beginning in 1995, by MetroLink's predecessor, ETS Global, Inc.

network is unique in that it not only can serve the largest metropolitan centers, but also provides cost-effective high speed connectivity to the most remote rural areas as well.

### **SchoolWeb™- The Internet Challenge for Education**

**SchoolWeb** is a proprietary system which provides a complete solution to a school's Internet and networking needs. SchoolWeb has a powerful suite of features including a content management system, conferencing and event applications, and a suite of IT services. The system includes a proven network and digital library solution that has been specifically designed to meet the needs of educational administrators, teachers, librarians and, most importantly- students. SchoolWeb offers easy, fast access to a wide range of trustworthy, high-quality educational content. SchoolWeb provides the most efficient solution for managing and delivering Internet-based, educational content and curriculum.

### **HealthWeb™- Support for Rural and Remote Healthcare**

The **HealthWeb** system is ideal for treatment decision support, remote diagnostics, telemedicine, continuing education/certification as well as the day-to-day activities involved in rural medicine. HealthWeb provides evidence-based medical content for a “connected” health information system, which provides efficient communication with the medical practitioner and medical support services. The HealthWeb system is a proven network and digital library solution that has been specifically designed to meet the needs of doctors, nurses and all health professionals. The HealthWeb system offers secure and fast access to a wide range of trustworthy, high-quality content that can be relied upon to be accurate and relevant to the medical request. A “connected” health system delivers the critical objectives of all stakeholders: improved health, more efficient use of time, and lower operational costs.

### **CommunityNet – Community-Based Programs & Services**

**CommunityNet** is a suite of applications and services designed to improve the literacy and standard of living of adults in these communities. The program incorporates technology, micro-economic development and adult/vocational education woven into a comprehensive package focused on achieving specific goals in the community including: Establishing locally owned and operated call centers and Internet Cafes in villages, providing teachers and resources for adult literacy programs covering the basics of reading, writing and simple mathematics, teaching essential ‘life-skills’ courses such as hygiene, nutrition and childcare, and introducing vocational education programs geared to creating jobs in the local economy. CommunityNet fulfills a fundamental need in any social responsibility program by creating life-altering experiences for people, and as a result producing positive economic and social results in the region.

## **Becoming a Self-Sustaining Enterprise**

While this enterprise is by nature altruistic, it is also geared to self-sufficiency. One of the greatest challenges of providing state-of-the-art Internet and telecom services to remote and rural areas is generating adequate revenue to cover ongoing operating costs. As such, MetroLink will seek supplemental sources of revenue from a number of sources, including creating quasi-commercial “micro-economic” opportunities, (such as CommunityNet). In addition, MetroLink will secure

concessions to allow excess capacity to be made available for commercial purposes. Revenue generated from the commercial venture will be returned to the enterprise to cover operating costs, as well as provide an adequate ROI for investors.

## MetroLink Self-Contained Modular Schools/Medical Clinics

In addition to providing Internet-delivered content applications and services for education, MetroLink has teamed with Green Horizon Manufacturing to provide **EduPlex** and **MedPlex** completely self-contained modular structures that can be quickly deployed to serve as a school facility or medical clinic in remote and rural areas.



**EduPlex** and **MedPlex** modular facilities are excellent replacements for any 'brick and mortar' buildings that may be constructed in compliance with a mining or energy company's social responsibility requirements.

**EduPlex** and **MedPlex** facilities are comprised of two to eight expandable modules. Classroom modules can accommodate up to thirty students each. Clinic modules are comprised of two to three examination rooms and a small laboratory. Overnight care can be accommodated by a five to six bed 'micro hospital'. Kitchen and dining facility modules are also available as part of the package. Each facility is completely 'green' and includes alternate power, water filtration and waste treatment, as well as a wide variety of Internet and communications systems, via wireless or satellite.

Units are shipped as standard seaboard container modules (7.5' x 7.5' x 40'), and are expandable at set-up to 15' x 40'. The entire facility can be set-up and operational in a matter of days, and can be moved if necessary. In addition, enhanced security features can be added in potentially hostile environments.

## Summary

MetroLink Solutions is making a significant commitment to support educational and rural health initiatives on a global scale. MetroLink has the experience, capability and mission to transform the educational telecommunications infrastructure within a country to a level where the benefits of a quality education and modern healthcare is available to everyone regardless of where they live, or who they are. Education is the "great equalizer". Many years ago, Peter Brougham (1778-1868) said that "Education make a people easy to lead, but difficult to drive: easy to govern, but impossible to enslave."

## About MetroLink Solutions

**MetroLink Solutions, Inc.** provides a wide variety of telecommunications applications, products and support services designed to bring world-class voice, data and video services, for education, healthcare and community development, to remote and rural areas of emerging markets worldwide. MetroLink also provides sophisticated security technology supporting a wide variety of perimeter, facility and personnel safety solutions in high-risk situations. MetroLink has formed strategic alliances with leading providers of protective security services, proprietary applications and advanced security hardware. These unique alliances are focused on ensuring the safety of personnel, safeguarding critical facilities, tracking the whereabouts of assets and monitoring the movement of vehicles in hostile and high-risk environments.

Many of MetroLink's security products and services were originally designed for use by the Department of Defense, and are in use by security agencies around the globe. Military versions of a number of these systems are in use today, supporting critical applications in hostile environments around the world.

## Contact Information

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