Executive Summary

As part of Pennsylvania’s overall electronic-government strategy, Governor Tom Ridge called for a bold move to secure advanced telecommunications services for state agencies that would also benefit local governments, schools, and public libraries, as well as foster economic development across the state. This initiative is known as Keystone Communications.

Keystone Communications was officially launched in late 2000 after nearly a year-long review of highly competitive proposals from two consortia comprised of traditional and non-traditional telecommunications services providers. The bid guidelines dictated the winning proposal provide for delivery of all telecommunications services—from voice and data to video conferencing and Internet access—under one prime contractor. This move consolidated the 22 previously contracts held with a various vendors from across Pennsylvania. The winning proposal was submitted by the consortium led by Pennsylvania-based Adelphia Business Solutions (ABS).

The proposed network design uses advanced technologies that will vastly expand the capacity available for state government telecommunications services. It provides for network redundancy, disaster recovery and online ordering, billing, and inventory management capabilities, which did not exist with the previous contract. The proposed network is part of the public telecommunications infrastructure rather than the existing closed network only accessible to Commonwealth agencies. This will provide incentives for telecommunications service providers to improve the network infrastructure across the state rather than just where Commonwealth agencies are located.

Key Economic Development Tool

In addition to providing advanced telecommunications services to Commonwealth agencies, the new contract allows local governments, schools and public libraries to secure advanced services at prices lower than they would normally be able to negotiate. The Keystone Communications project will benefit business and residential customers by fostering a competitive telecommunications environment, which should drive down costs and improve the quality of service. As part of its proposal, ABS has pledged an initial, non-conditional $10 million investment to extend advanced services to under-served urban and rural areas, with another $90 million made available in the form of matching funds. Matching funds are available from existing state and federal community/economic development programs.
Category: Communications Infrastructure

Nomination: Keystone Communications: www.cts.state.pa.us/telecom
Serving State Agencies, Benefiting Our Communities

a) Description of project, including length of time in operation

One of Pennsylvania Governor Tom Ridge’s guiding principles for state government’s use of technology is that agencies continually evaluate their application of current information technologies to ensure they are being used to their fullest capacity. When Governor Ridge took office in 1995, he found that state government had 22 separate contracts for phone service, data communications, video conferencing capabilities and for its Internet access. These different contracts formed a patchwork of services that kept state government from getting the best deals in spite of its considerable buying power.

Spending as much as $80 million annually on telecommunications services, the Commonwealth is the state’s largest telecommunications purchaser. Gov. Ridge challenged his Office of Administration to strategically invest finite state dollars in a way that would stimulate the private development of a state-of-the-art public telecommunications network. The goal was to provide attractive telecommunications services for state agencies while making advanced communications services available to all the state’s residents.

In 1997, with the Commonwealth’s telecommunications contracts approaching the end of their terms, the Governor’s Office of Administration organized a conference in Pittsburgh, Pennsylvania to solicit advice from industry experts, university professors and concerned citizens on how the Commonwealth should approach its procurement of advanced telecommunications services. The recommendations from the conference facilitated an innovative new procurement model for Pennsylvania state government—the Request-for-Qualified-Contractor (RFQC), which was structured to provide equal and fair opportunities for participating parties. Two best-and-final-offers were received for consideration from two large consortia: one led by Bell Atlantic with 39 members, and a second led by Adelphia Business Solutions (ABS) with 16 members.

The RFQC required the submitted offers to provide for all telecommunications, from voice and data to video conferencing and Internet access. It emphasized partnering with a mix of traditional and non-traditional service providers in order to make the most of existing facilities and resources, and avoid costly duplication. The RFQC also encouraged vendors to propose e-commerce solutions for billing, procurement and equipment inventories. The RFQC detailed proposals were received in June 1999, and the best-and-final-offers were received in December 1999. After a 10-month evaluation period, a five-year contract was awarded to the ABS-led consortium in March 2000.

The migration of Commonwealth telecommunications to the new contract, known as the Keystone Communications project, began officially with agencies moving into the newly built Keystone Building in down Harrisburg from October through December 2000. The transition of all voice and data services for


approximately 3,700 locations statewide will run from January 2001 to December 2002.

b) Significance to the improvement of the operation of government

Prior to the issuance of the RFQC and the new consolidated telecommunications contract, the Commonwealth had to manage 22 separate contracts with a variety of service providers. The new consolidated contract with Adelphia Business Solutions (ABS) is providing a single point of contact for all the Commonwealth’s telecommunications needs.

As part of the contract, ABS is providing online ordering, provisioning, billing, and inventory management capabilities, which did not exist with the previous contract. For the first time, Commonwealth agencies will have an accurate, up-to-date inventory of all telecommunications services and associated equipment. These real-time services will help to eliminate billing errors that currently cost the Commonwealth significant time and money to resolve. An accurate inventory will also assist in planning for future deployment of new telecommunications equipment and services.

Network Infrastructure

The proposed network design will use advanced technologies such as ATM (Asynchronous Transfer Mode), SONET (Synchronous Optical Networks) and DWDM (Dense Wavelength Division Multiplexing), which will provide for virtually unlimited bandwidth, vastly expanding the capacity available for state government telecommunications services. This is critical as Commonwealth agencies continue to provide state government services online. Every state government field office will have access to high bandwidth network connections and advanced telecommunication services. This means that each Pennsylvania county will have at least one access node to the high broadband network backbone.

The Commonwealth of Pennsylvania has experienced an ever-increasing rate of activity for its Internet sites. In the last 6 months alone, our public websites have registered over 1 billion hits (visits). More bandwidth capacity and a reliable network are crucial to providing more effective and efficient government services to our constituents.

c) Benefits realized by service recipients, taxpayers, agency or state.

The previous Commonwealth network was a closed network, accessible only to state agencies. This often created a “digital divide” between state government offices and adjacent local governments, schools and public. The new telecommunications contract addresses this “digital divide” by allowing these entities to procure telecommunications at competitive costs negotiated as part of the Commonwealth contract. While residential and business customers may not
buy telecommunications services under the Commonwealth contract, the Commonwealth has required that the services available under this new contract be provided through the public network infrastructure and the service structure of the prime contractor (ABS) throughout all areas of the Commonwealth. This means that the services will be publicly available throughout Pennsylvania. In addition, it is expected that this contract will promote increased business competition in all Pennsylvania markets. This should further expand and improve the availability and affordability of these new services for all the state’s residents.

Helping to ensure advanced telecommunications services are available across the state is only one of the benefits to government, businesses and residential customers from the Keystone Communications project. Developing a bigger, better, faster network is important, but ensuring its availability and reliability is critical. The proposed network has been designed with the latest technology for providing fault-tolerant and self-healing networks. Disaster recovery capabilities in the new network, which were not available previously, is state-of-the-art. Most network links have multiple-path connections, and the backbone is fully redundant. There are redundant, hot spare, and disaster recovery components available throughout the design to reduce the likelihood of failures on the network and to ensure that any major failure can be quickly recovered or relocated to restore service.

Another benefit of the contract with Adelphia Business Solutions (ABS) is in the area of economic development. As a value-added feature of its contract, the Adelphia-led consortium provided funding for a public-private partnership known as “Key-Net.” Through this partnership, ABS has proposed a plan for multiplying the benefits achieved from its Keystone Communications-related investments. The Key-Net initiative will help to create a single “Keystone community” by promoting broader information and technology access through funding to extend telecommunications access to Pennsylvania’s underserved urban and rural communities. By encouraging collaboration among government, business, education, and community sectors, Key-Net will allow all parties to leverage their financial and technical resources to produce a significantly improved infrastructure that all can share. ABS has pledged an initial, non-conditional $10 million investment, with another $90 million made available in the form of matching funds once pilot projects have proven successful. An additional $100 million in matching funds can be provided from existing state and federal community/economic development programs. Additional financial support will be secured by recruiting new business partners who are interested in expanding the telecommunications resources in their region of the state.

d) Return on investment, short-term/long-term payback

In addition to state and local government access to more advanced telecommunications services at higher bandwidths and the economic development potential of the Key-Net partnership, the Keystone Communications project is expected to provide some very substantial short-term and long-term
packs. The five-year telecommunications contract with ABS is valued at $228 million, but it will also result in a cost-savings of over $100 million over the life of the contract. These savings can be used by agencies to purchase higher network capacity to support expanded e-Government service provision. These savings are a result of the use of more efficient advanced technology to provide services, leveraging the Commonwealth's buying power and promoting intense competition between the two vying consortia. The cost avoidance savings may exceed current estimates, as the ABS team's best pricing is for data and video communications—areas where state agency usage is expected to rise.