



M E M O R A N D U M
Commonwealth of Pennsylvania
OA/Office for Information Technology

DATE: MAY 6, 2004

SUBJECT: **Statewide Public Safety Radio System**

To: All Members of the PA House of Representatives
All Members of the PA Senate
All County Commissioners

FROM: Arthur C. Stephens
Deputy Secretary for Information Technology

Keith Martin
Director, Homeland Security

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We are writing to you regarding Pennsylvania's Statewide Public Safety Radio System. The system is designed to allow all state agencies to use the same system, thus allowing improved interoperability across state agencies and the reduction of separate radio systems across the Commonwealth agencies.

The purpose of this letter is to provide you with accurate information regarding the status and progress of the system in light of recent inaccurate reports and rumors. Some reports have confused general statements regarding investment in the system by the State, or total investments leveraged during construction of the system, with expenses incurred by the project. This is not accurate. The Commonwealth has two key projects underway, State Police's Integrated Information Management System (IIMS) and the Statewide Radio Project, which together total over \$400 million and represent Pennsylvania's total state government investment in public safety wireless infrastructure, but the two projects are funded and managed independently. In addition, the value of the total investment in wireless system infrastructure in Pennsylvania has been represented as, and is, well over \$400 million. This figure represents the cumulative value of many diverse infrastructure investments, including not only the Commonwealth's capital expenses, but also including: previously planned and identified operating expenses; the value of county, local government, and Commission wireless infrastructures; and, the value of non-governmental infrastructure owned by such partners as First Energy that is used in the construction and operation of the system. In summary, the original capital appropriations for the Statewide Radio Project were \$222.03 million. The project is anticipated to be completed for approximately \$240 million. Details of those expenditures are described later in this letter.

Background

The Project began during the Ridge Administration with funding by Legislative Act 148 (1996) at \$179.03 million. Following this authorization, the engineering firm RCC Consultants, Inc. was awarded a contract by competitive bid to support the Commonwealth's system bid, design, and construction efforts.

Following release of competitive procurements, Legislative Act 35 (1999) allocated an additional \$43 million for site construction, for a total of \$222.03 million. Both capital authorizations were requested and approved prior to the execution of any contracts. Contracts were awarded to the following vendors in the fall of 1999:

- Rohn Industries, Inc.: Site construction (towers, shelters, generators, etc.)
- Alcatel USA, Inc.: Microwave equipment
- M/A-COM, Inc.: Trunked radio (800 MHz) equipment

Deployment of electronics began in December, 1999 with a multi-site, multi-county, pilot-trunked radio system deployed by March, 2000. Operational use of the system for voice communications began in June, 2001 at Presque Isle State Park.

Current Operational Status

Operationally, the system has provided voice and data communications since March, 2000. As tower sites were constructed and brought on-line, coverage improved to the point where state agency transition to the new system began in 2002. Over 4000 radio system users are active, with the majority using voice only, but also including approximately 1000 State Police mobile data users. Agencies and organizations with voice traffic on the system include PEMA, PennDOT, Attorney General, Probation & Parole, the PA National Guard, Huntingdon County Sheriff, and the North Central Area Transportation Authority.

All public safety features and functions of the system are working and in service. Final software and function testing took place in the fall of 2003, including such key features as the vehicle repeater and advanced voice and data encryption. Voice quality testing showed the system's clarity and intelligibility to be superior to other public safety digital systems, and even superior to some commercial services such as Nextel's. The system also provides a suite of tools that can provide advanced communications interoperability between the statewide system and legacy system users; these interoperability tools also have been tested, and plans are in the process for deployment in the Commonwealth.

Current Financial Status

Financially, the project remains within its capital budget and is projected to continue to remain within budget. The legislative approvals actually fund two separate funds, which cannot be mixed. Of the \$222 million capital authorization, approximately \$128 million is allocated to electronics and \$93 million for site construction. In addition to the \$222 million, over the life of the project to date, \$21.8 million in operating funds has been allocated to the project for specific additional expenses, as noted below.

Of the \$128 million allocated for electronics, \$30.7 million was committed to Alcatel for the microwave and fiber optic system; to date, \$27.5 million has been paid, and total payment for completion of the project remain projected below the \$30.7 million allocation. \$95 million was committed to M/A-COM for trunked radio electronics; to date, \$67.5 million has been paid, and total projected payment for completion of the project remains at \$95 million. The remainder of the capital authorization supported an infrastructure partnership with the Pennsylvania Turnpike Commission for a shared microwave network along the entire length of the Turnpike. In addition to the capital authorization, \$2 million in operating funds were committed following 9/11/2001 to purchase a mobile Regional Operating Center for disaster restoral, \$1.4 million in operating funds were committed to support the Pennsylvania State Police's development of a custom dispatch console interface to the radio system for their new Consolidated Dispatch Centers, and \$1.27 million in operating funds were allocated for enhanced interoperability between counties and the state system. This brings the total electronics expenditures to approximately \$132.7 million.

\$94 million was originally allocated for the construction of tower sites and for engineering support. Of this, approximately \$60 million was originally allocated to Rohn's contract, \$17 million to RCC, \$13 million for microcell site deployment, with the remaining \$4 million allocated to various smaller site development projects. Over time, site acquisition has been impeded by a number of issues including land ownership issues and local opposition to tower construction. This has resulted in changes in site locations and delays in site and system construction. A total of \$17.1 million in operating funds have been allocated over time to site construction, predominately to pay for engineering costs associated with system design changes and the design and implementation of replacement sites.

Current Challenges

The project faces three main challenges at this time: coverage concerns, interoperability issues and agency transition. The coverage concerns are caused primarily by an inability to continue to construct radio towers due to the bankruptcy of Rohn Industries. Rohn Industries, Inc., filed for Chapter 11 bankruptcy protection in the late summer of 2003. In reality, most construction of tower sites stopped in the early summer. Under bankruptcy law, the Commonwealth has been prohibited from constructing the remaining tower sites using another vendor, and Rohn has been unable to proceed with construction of those sites. A total of 18 tower sites are affected -- six of which are substantially complete and twelve of which have not yet started construction. The Commonwealth is working diligently with Rohn and the Bankruptcy Court to reach a resolution of this issue, allowing site construction to resume.

Coverage Concerns

Primarily as a result of the Rohn bankruptcy and unplanned changes in tower site locations, coverage for the system remains less than the final design requirement. There is currently significant coverage in all but six counties in the state. The system requirement of 95% coverage by land area, by county, is unchanged from the original requirement. Testing to date, completed with the participation of state agency system users, has shown that the actual coverage provided by the system exceeds design predictions. Despite the tower construction impediment, 19 counties will exceed the required 95% coverage level by the end of June 2004. The speed at which the remaining areas receive coverage improvements will depend significantly on the resolution of the Rohn bankruptcy proceedings.

Agency Transitions

The original project plan called for each state agency to plan and execute its own transition from its legacy radio system to the new system. As actual transitions began, it became apparent that a much higher degree of support was warranted. Planning for radio transition has, in most cases, required detailed review of agencies' operational plans and also has entailed working with agencies who are addressing significant operating changes due to restructuring or other unrelated drivers. Additionally, many unique needs of each agency need to be addressed – we must ensure the safety of all radio users.

Interoperability Challenges

The requirement for communications between state agencies, and county and local governments, has been a key need since the inception of the project. Deployment of the technology and hardware must be accompanied by input from county and local emergency service providers, and by comprehensive operational planning on a regional basis. These phases of interoperability deployment are now underway.

In closing, we note that the system remains a critical component of Pennsylvania's Homeland Security strategy. The Commonwealth places a high priority on completion of the remaining towers, on transition of user agencies, and on deployment of the statewide interoperability solutions. We hope for a prompt resolution of the Rohn issue, with the result being coverage statewide improving to exceed 90% by the end of this calendar year. We welcome any questions regarding the system, county and local government integration or participation, or communications interoperability. For more information, please contact Deputy Secretary Art Stephens, Governor's Office of Administration, at (717) 787-5440.