MEMORANDUM
Missouri Department of Transportation
St. Louis District

TO: Eric Schroeter
State Design Engineer

CC: Jim Smith – de
Alex Wassman - tr

FROM: Lee Hillner
Project Manager, SL District

DATE: 05/20/2016

SUBJECT: MoDOT - SL District
Route 67, St. Louis County
J6Q2039F - Lindbergh Tunnel ITS Upgrade Project
Proprietary Item Certification (PIC) request for TransSuite, and Opto 22 equip.
Public Interest Finding (PIF) request for TransCore ITS, LLC; and Opto 22

Project J6Q2039F will upgrade various MoDOT ITS systems at the Lindbergh Tunnel; and at the same time Lambert St. Louis International Airport will upgrade various life safety systems at the tunnel under a separate but coordinated project. Prior to the tunnel’s opening back in 2004 MoDOT and the Airport entered into an agreement outlining responsibilities of each agency for the safe and efficient operation of the tunnel. Per the agreement, in general MoDOT is responsible for traffic and ITS items and Lambert Airport (City of St. Louis) is responsible for the life safety systems.

The district continuously coordinates with the Airport for tunnel maintenance and operations. This project is no exception as several coordination meetings have taken place over the last 18 months. It’s important to implement these two projects at the same time in order to facilitate system integration efforts, and to minimize downtime of the tunnel monitoring systems and therefore avoid long term closures of the tunnel. J6Q2039F is scheduled for bid opening in MoDOT’s September 2016 letting. Lambert Airport has expressed to MoDOT their intention to take bids on their tunnel life safety upgrades contract within a similar time frame.

The SL District Traffic Management Center (TMC) has been using TransCore’s Advanced Traffic Management System (ATMS) software to manage the TMC and ITS system since 2011. The Lindbergh Tunnel uses Closed Circuit Television (CCTV) cameras and Dynamic Message Signs (DMS) to monitor conditions in the tunnel and communicate information to users. In order to provide the control of these ITS systems at the TMC, the devices must be integrated into the existing TransSuite ATMS software system.

TransCore’s ATMS software was MoDOT’s previously selected vendor to operate and manage the traffic and ITS systems both in St. Louis and rural parts of the state. It’s only practical to continue this arrangement with the large capital investment systems of our TMC and ITS operations.
Previous PIC/PIF request for TransSuite and TransCore have been approved based on MoDOT’s selected ITS configuration. The construction contract for this project will require MoDOT’s contractor to hire TransCore to complete the integration of the ITS equipment devices.

As part of the tunnel ITS upgrades under this project the existing Supervisory Control And Data Acquisition (SCADA) controllers are being upgraded and standardized on the Opto 22 SCADA system. This system has the necessary equipment to integrate the camera presets with the various tunnel alert systems. Using a different vendor’s SCADA system at this point would require a more complicated camera preset/alarm interface solution, plus additional training and additional spare parts inventory. By using the Opto 22 system we will be able to leverage existing Opto 22 equipment already in place and save costs associated with long-term operation and maintenance.

To ensure compatibility of ITS improvements installed at the Lindbergh Tunnel under project J6Q2039F with MoDOT’s existing software at the district TMC: this letter request approval of:

1. Proprietary Item Certification (PIC) of patented TransSuite ATMS Software.
2. Public Interest finding (PIF) for TransCore ITS, LLC which is the providing vendor and manager of MoDOT’s SL District TMC ITS software.
3. Proprietary Item Certification (PIC) of proprietary Opto 22 SCADA Equipment.
4. Public Interest finding (PIF) for Opto 22, Inc. which is the vendor of the existing SCADA equipment at the Lindbergh Tunnel.

This approval for a Proprietary Item Certifications (PIC) and a Public Interest Findings (PIF) is requested for the following reasons:

- Consistent ATMS software is essential for synchronization with existing ITS facilities such as CCTV, DMS, and Lane Use Control (LUC) systems.
- No desirable or economical alternatives exist - as deploying a new and different ATMS software would be more costly than maintaining the existing sufficient software.
- Deploying a new and different ATMS software and Opto 22 CCTV alarm interface would result in the loss of previous SCADA investments and enhancements to the existing ATMS.
- Deploying new ATMS software and SCADA interface would require operators to be retrained, devices reintegrated, and new practices put in place. This would create unnecessary inefficiencies in both the TMC and Lindbergh Tunnel operations.
- It is not feasible to solicit services from another vendor to support and maintain the existing proprietary TransCore’s ATMS software as previously installed at the TMC.

Approved by:

I do hereby certify that in accordance with the requirements of 23 CFR 635.411(a) (2), this patented or proprietary item is essential for synchronization with existing highway facilities.

Eric E Schroeter, State Design Engineer
In accordance with the requirements of 23 CFR 635.411(c), I agree that use of the indicate equipment from the sole source provider is in the public Interest.

Federal Highway Administration