Meeting Date: October 4, 2007
Location: PennDOT District 6-0 TCC
Purpose: PA-DE-NJ Coordination Meeting

List of Meeting Attendees:

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Handouts provided during the meeting:
1. Agenda
2. Meeting Minutes from June 12, 2007
3. PA-DE-NJ-MD Coordination Material
4. Contact List

I. Opening Remarks

The meeting began with introductions followed by a review of the agenda.

Gene Donaldson (DelDOT) mentioned that the transportation system needs to be operated not just statewide, but also regionally. Fiber connections between states can be made relatively easily as the individual state systems are in some cases just a few feet apart. We have all been building systems based on a variety of networks in each of the states, and we have to be able to support each other. This is a kickoff meeting on the PA, DE, and NJ side. We need to think about how we will handle the security to allow voice, data, and video connections through each of our states and systems.

Manny Anastasiadis (PennDOT) informed the group that the District is just completing the 202-Section 3 project which extends from King of Prussia to the DE state line. The connection to Delaware's fiber would require about 2000 feet of conduit and fiber. Gene mentioned that NJ could possibly be completed through DelDOT's network over the DE Memorial Bridge. Some types of information that could be shared would include traffic impact data, incidents etc. Connectivity is vital. How the connections are used for additional purposes would be determined by this group.

Angelo Risoldi (NJ Turnpike) mentioned that the Turnpike network includes the Garden State Parkway and NJDOT. The Turnpike is connected using dense weave forced wave division multiplexing for internal communications and 1-Gigabyte Ethernet for external communications. The Turnpike is connected through area 51 Traffic Mgmt. and Public Safety and connected to the police. NJ DOT has dense wave drops at Trenton, Cherry Hill (STOC), Elwood Park (NTOC), and the new TMC. The Turnpike system is across the DE Memorial Bridge. The Turnpike also has a spur at Exit 6 that goes towards the PA Turnpike. The PA Turnpike is working towards a connection across the future new structure over the Delaware River and as part of their widening of the PA Turnpike from I-95 to the river. It was mentioned that the Walt Whitman Bridge has some empty conduit across it.

Dave Russell (DE DTI) asked Gene if the fiber that goes up to the I-95 north sign could be used. Gene answered and said no, the quickest and shortest path is off 202 and Naamans Road. It's about 2000 feet from DelDOT's last signal on that fiber. This is a Single Mode fiber. Policy for tying into the State of Delaware fiber network for anyone outside the network would always require passing through a firewall at the tie-in point.

A question was raised as to how the connection would occur between NJ and DE. Gene indicated that DelDOT's fiber on US Route 13 is adjacent to the fiber that connects to the Delaware Memorial Bridge (as part of the NJ Turnpike EZ-Pass system). Angelo confirmed that the 1 Gigabyte Ethernet is already available on the Delaware side of the Delaware Memorial Bridge.

Dave mentioned that, within DE, it would be helpful to give a wish list of communications. Could the committee be more specific/provide details with the information they would like to share? For example, we would like to share IP based video. It would help in the design of the firewalls at the two border points. Jody Sweeney (DelDOT IT) concurred with Dave. A problem would be time. If you needed this by February or March it's not going to happen.

This meeting was the first invitation to PennDOT BIS to participate in the efforts of PennDOT District 6-0 and DelDOT to establish a direct connection between their respective Operations Centers. PennDOT BIS anticipates that any interconnect would need the approval of the Governor's office, and be spearheaded by the Office of Information Technology (OIT) under the Office of Administration (OA).

Angelo shared that when NJ put in the EZ-Pass they had dark fibers. The idea did get presented to the governor's office in a 10 mile stretch for a course wave division multiplexed system. They used multiple wavelengths on two fibers to build an optical ring. He also has something from a few years ago from International Bridge, Tunnel, and Turnpike Association (IBTTA). Bruce asked that he send along the information to him. Angelo provided his cell phone number to the group.

Don Kiel mentioned that GeoDecisions has put together a master plan for statewide connectivity for PennDOT. They have visited and talked to DE and NJ to hear about plans, and been in very close contact with the BIS group at PennDOT. Their deadline on the master plan is the first of February 2008. Fred Kho added that BIS has been working with the PA state police and PEMA for data sharing. The data sharing will probably start out as a one-way data flow from PennDOT.

Deb Snyder (NJDOT) asked the question of whether NJDOT would be allowed to use any portions of the bridges for connecting. The DOT is trying to replace analog with IP based video. Access lists that need to be coordinated through the routing list would require a sit down discussion. Angelo (NJ Turnpike) – There is fiber going across the Delaware Memorial Bridge. There is also fiber going out the Exit 6 extension. It's Gigabit Ethernet right now. Angelo believes that a project/undertaking like this might take several years. Manny mentioned that the most appropriate near connection would be across the Delaware Memorial Bridge.

Nicole Ryan (PennDOT BIS) mentioned that Pennsylvania has started looking into sharing video images between state agencies. There have been PennDOT BIS representatives in the statewide connectivity meetings but this is the first meeting they have attended on PA-DE-NJ connectivity. PennDOT BIS is looking at an IT based solution for internal connections. The internal interconnection between PennDOT's TMCs and other internal state agencies must be done before they can reach out to the other states.

PennDOT BIS is concerned from a political and regulatory standpoint for the interstate connections. Manny mentioned that BHSTE has already been working quite a bit on getting that approval.

The question was raised who is the primary steering group for designing the network architecture between states. The answer was given that this group is the group who will make it happen.

Gene mentioned that since 1999 DelDOT has been building DelTrac. In DE as part of the transportation management system, they are using Gigabit Ethernet now.

Dave shared that the Department of Technology and Information used to be heavily involved with DelTrac. The dense weave force wave division multiplexing is really the way to go to maximize the use of the fiber. Once the technical and political issues are worked out, bandwidth should not be a problem.

Gene emphasized that the goal of this effort is to share data. The I-95 Corridor Coalition is looking at how to do this from Florida to Maine.

Nicole Ryan asked who the DE contact was for video. Gene Donaldson mentioned that the program falls under him and asked Nicole to send him an email.

Gene asked Elayne/Dave what would be the next step from Delaware's perspective? Dave answered by saying that the main question will be how the firewall is handled at the border. Having a list of functional requirements would be helpful.

For PennDOT, District 6-0, BIS and BHSTE need to be involved. The District will address the political permission/issues. All will need to be involved with the technical issues from their perspectives.

For NJ – Angelo will send over drawings of their network and seeing if it will fit other states needs. Deb's said IT folks would be able to take it up the line.

The group identified two main efforts that need to be addressed: (1) institutional (political/financial), and (2) technical. Develop individual state business plans i.e. list of bullets that provides functional requirements and a concept of operations.

Deb asked who will be coordinating these groups. This committee will with the aid of Gene's consultant (ORA). ORA will contact each state to get the list of contact individuals.

Dave Russell (DE) – Who would be funding this effort? Gene indicated that his budget will handle the Delaware issues once the requirements have been identified and cost estimates provided.

Next Steps

- Nicole Ryan (BIS) to email Gene Donaldson regarding video information request.
- Angelo Risoldi (NJ Turpike) will send over drawings/information of their network for the committee to use to see if it will fit the other states needs.
- Angelo will send information previously obtained from IBTTA.
- Each state will assign one or two people that could be a part of this working committee to move this project forward. ORA to get the information from each state.

- Each state needs to develop business requirements (list of project needs) so that the committee can prepare a comprehensive set of business requirements for the tri-state interconnection efforts.

We believe the foregoing minutes to be an accurate summary of the meeting and related decisions.

Minutes prepared by:
Orth-Rodgers & Associates, Inc.

cc: All Meeting Attendees
         PA-DE-NJ Coordination Committee Members