

## **Notice of Intent to Consider Adoption**

### **Institute of Transportation Engineers ITS Interim Standard**

#### **STANDARDS FOR TRAFFIC MANAGEMENT CENTER-TO-CENTER COMMUNICATIONS {ADVANCED TRAFFIC MANAGEMENT DATA DICTIONARY (TMDD) AND MESSAGE SETS (MS)} Version 2.1**

The Standards for the Traffic Management Center-to-Center Communications (TMDD and MS) have been approved by the ITE/AASHTO TMDD Steering Committee as a Standard. The Institute of Transportation Engineers intends to consider adoption of this version as an interim standard as of April 30, 2005 assuming no final appeals are received. Please check the ITE website ([www.ite.org](http://www.ite.org)) for a notice after April 30, 2005 as to whether this version has been adopted by ITE. When adopted this standard will be jointly published by ITE and AASHTO.

#### **SUMMARY OF THE STANDARDS FOR TRAFFIC MANAGEMENT CENTER TO CENTER COMMUNICATIONS (TMDD, MSETMCC) Version 2.1**

Version 2.1 of the standards provides the foundation of the Center-to-Center (C2C) Concept of Operations and Requirements for Advanced Traffic Management System (ATMS). It should be noted that the ATMS is a very complex system and there are many other standards that are necessary for development and center-to-center operations. This document, however addresses the most fundamental elements of an ATMS.

This document is intended for primarily the following:

- Transportation operations managers
- Transportation operations personnel
- Transportation engineers
- Transportation management procurement officers
- System integrators
- Device manufacturers

C2C communications can be used to:

- Provide event information to other centers
- Provide traffic and travel data to other centers
- Help coordinate operations within the defined C2C network
- Provide remote control of traffic control devices

The C2C environment is operationally diverse. All of the systems that exchange information do not serve the same functions but do use the base Traffic Management Data Dictionary (TMDD) data exchanged among centers. Even systems with the same functions may not operate identically. This diversity requires both a flexible approach to the required content in each data exchange and a rigorous definition of the data being exchanged.

The C2C environment is sparsely deployed. There have been few large integrated regional deployments, so operational experience is available only from a few sites. The time to fully deploy a regional or statewide system may be lengthy, covering 5 years or more. The overall approach to standards needs to support the replacement of nearly all C2C software over time.

The ITS standards development process uses a systems engineering process that requires a Concept of Operations document to define user needs. Further, the established system engineering process states that functional requirements must only be developed for those functions for which a need has been established.

The Concept of Operations (ConOps) and Requirements stage in this process is to identify and functionally describe the ways in which the system will be used. In the case of this document, this entails identifying the various ways in which those addressed above may use Center-to-Center connections to other centers to fulfill their duties. This Concept of Operations and Requirements provides the reader with:

1. A detailed description of the scope of this standard;
2. An explanation of what operations the Center-to-Center connections provide;
3. A starting point in the procurement process; and
4. An understanding of the perspective of the designers of the standard.

The Concept of Operations and Requirements are neutral as to the underlying C2C protocols, such as CORBA, DATEX, XML or other. The protocols are transparent to the system operators and no references to the specific features provided by an underlying protocol are part of the Concept of Operations.

The documents include the TMDD data elements and Message Sets in ASN.1 representation and XML representation.

The Version 2.0 of the TMDD and MS standards have been balloted and approved jointly by the American Association of State Highway and Transportation Officials (AASHTO) and the Institute of Transportation Engineers. Comments associated with the development of Version 2.1 include those from TMDD Deployments

### **Effective Date of the Standard:**

The effective date of this standard will not occur until after the ITE International Board of Direction successfully ballots this document, unless an appeal is received.

### **How to View the Draft Standard:**

Between now and April 30, 2005, the final draft version of the recommended Interim Standard can be viewed on the ITE Website at <http://www.ite.org/standards/index.asp>. If no appeals are filed, the ITE International Board of Direction will ballot the standard and it will be available for purchase from ITE and AASHTO.

### **How to File an Appeal:**

If you wish to appeal the adoption by ITE of above mention interim standard, submit a written appeal to ITE Headquarters (1099 14<sup>th</sup> St. N.W., Suite 300 W, Washington, D.C. 20005, Attn: James M. Cheeks, Jr.) by the close of business on April 30, 2005. The written appeal shall state the nature of the objection(s) including any adverse effects, the step(s) of the ITE procedures or the section(s) of the standard that are at issue, and the specific remedial action(s) that would satisfy the appellant's concerns. Any previous efforts to resolve the objection(s) and the outcome of each shall also be noted.

### **If an Appeal is Received by ITE:**

ITE Headquarters will work with the TMDD Steering Committee chair to develop a response. Within 30 days after receipt of the appeal, ITE Headquarters shall respond in writing to the appellant, specifically addressing each allegation of fact in the appeal to the extent possible.

If an appeal is not able to be resolved informally in a manner consistent with the ITE procedures, ITE Headquarters shall initiate the process for the appointment of an Appeals Panel and will schedule a hearing.

If the timeframe for the above actions will extend beyond April 30, 2005, another notice shall be provided announcing a delay in the anticipated date of adoption by ITE.