Memorandum

Subject: Notes from the TMDD Steering Committee Meeting
Dates: February 28 & March 1, 2007
Venue: Houston TranStar (thank you to Andy Mao)

The following notes describe some of the subjects discussed during the meeting. It should be noted that this report does not attempt to capture all of the specific comments for version 1 of the requirements document that were addressed during the meeting; that has been left to the Consultant, ConSysTec.

The meetings started at 8:30 AM on 2/28 and concluded at 11:40 AM on 3/1. Meeting attendees:

Present Wednesday 2/28	Present Thursday 3/1	Employer
Bob Rausch	Bob Rausch	TransCore
John Whited	John Whited	IA DOT
Marc Forgang	Marc Forgang	Telvent
Stan Slavin	Stan Slavin	Caltrans
Glen Massarano	Glen Massarano	Siemens ITS
Blake Christie	Blake Christie	Noblis (Mitretek)
Peter Davies	Peter Davies	Castlerock
Jeris White	Jeris White	Noblis (Mitretek)
Ed Seymour	Ed Seymour	TTI
Joel Markowitz	Joel Markowitz	MTC
Raman Patel	Raman Patel	Self
Siva Narla	Siva Narla	ITE
	Ed Fok**	FHWA – Resource Ctr.
	Bill Brownlow**	AASHTO
	James Pol**	FHWA
Sanjay Patel	Sanjay Patel**	Transcom
Steve Dellenback	Steve Dellenback**	SWRI
	Morgan Balogh**	Washington DOT
Jeff Brummond	Jeff Brummond	Iteris
Patrick Chan	Patrick Chan	ConSysTec
Bruce Eisenhart	Bruce Eisenhart	ConSysTec
	Richard Dye**	Maryland SHA
	Dave Gardner**	Ohio DOT
	Gloria Guen** (partial)	Caltrans
	Canny Quach** (partial)	LA DOT

Note that a teleconference bridge was provided by ITE for the continuation of the meeting on March 1st and those shown with an ****** above participated via telephone and web conference. *GoToMeeting* (by Rausch) was used to support those connected via the internet.

Names shown in shaded boxes are TMDD committee members. The following TMDD committee member was not present: Curt Pape – Minn DOT;

Summary of meeting discussions

1. The meeting started with self introductions and Siva reviewed the ITE meeting anti-trust policies.
2. Steve Dellenback noted that the documents were not provided on time – and as a result, he felt the review was rushed; he noted that many of the issues with version 2.1 were attributable to inadequate review time and rushed deliverables. He requested that additional

time be allowed for the next review cycle. Result: the schedule was adjusted to provide additional review time; additional schedule changes were made as explained later.

3. ConSysTec was asked to review the schedule to show the current schedule reflecting the current slippage (estimated at 2 weeks). They agreed to revise the schedule and post to the web site within a couple of days. The schedule is being revised based on the updated meeting schedule (see below).

4. Version 2 of the requirements document is now due to be distributed by 3/19/07. Reviewers and committee members were asked to provide their comments by Friday, March 9, 2007 to provide sufficient time for incorporation into version 2 of the requirements document. [note that the project plan required the receipt of comments within 3 business days after each meeting – which in this case would be March 5th.]

5. Patrick Chan reviewed the process that ConSysTec followed for the development of the requirements document (see slides). Bruce outlined the goals for the day; he noted that the device management (exchanges) had been structured to follow a general formula and asked if everyone felt the formula was correct (yes). He then noted that the individual device exchanges would identify the device specific data.

6. It was noted that the "point of view" from the prospective of the sourcing center or the receiving center needs to be consistent throughout the document. This was an issue with Version 2.1. ConSysTec agreed to review and correct.

7. Blake Christie noted that it is important to ensure that there is a specific requirement for each optional field or that the optional fields had to be grouped together to meet a specific requirement. ConSysTec will review and adjust.

8. There was some discussion regarding the security design of the existing standard and the use of tokens. This discussion did not reach any specific conclusions and it is likely that the use of tokens (as described in version 2.1) will be made optional. Deployers present indicated they were not using tokens and were relying on other techniques to manage the security of the exchanges between centers.

9. There was considerable discussion regarding the definition and structure for owner, organization, agency, and then center. The group agreed that the TMDD needs to follow the NTCIP 1104 naming convention where appropriate. The consultant was asked to review the structure used by 1512 and to prepare a brief (1 page) paper describing the structure and usage of agency, organization, and owner.

10. There are many message commonalities between TMDD, IEEE 1512, and SAE J2354. Joel noted that it was important that the data elements exchanges in the TMDD messages be consistent with the data needs of the other standards. While it was noted that each of these standards were developed by different bodies to address requirements from their respective domains (Traffic management, Incident Management, Traveler Information), Joel suggested that the TMDD effort should review the contents of these standards to avoid needless duplication or inconsistent data.

11. It was noted that for location referencing, the TMDD needs to make specific references to the LRMS - SAE J2266.

12. It appears that the concepts of severity and priority with regard to "events" need to be clarified. Joel provided some input, but felt that at least one of these parameters needed to be included in the filtering capability for event information requests. The consultant needs to develop a game plan and it was suggested that they look at the ATIS and IEEE standards for examples.

13. During the discussion of the exchanges for CCTV cameras, it was noted that there were no units for zoom, iris, and focus. It was requested that the TMDD seek guidance from the NTCIP 1205 working group in this regard (Rausch).
14. During the discussion of the needs and requirements of ADUS, it was noted that the term "raw" detector data is used, but there was no definition as to exactly what "raw" meant. It was suggested that the ADUS people be asked for a specific definition. There is a need for metadata to describe the properties of the detector data. It was also suggested that the contractor review the definition of raw data contained in the ADUS strategic plan. Dave Gardner agreed to provide the detailed ADUS feedback by Friday 3/9/07.
15. Note that Bob Rausch shared the draft ISO technical report which is being reviewed to address similar issues; ISO technical Report 21707 was sent to Dave Gardner.
16. There was some discussion of the weather data requirements; James Pol agreed to review the information in the TMDD requirements and review the NTCIP 1301 work to clarify the requirements.
17. It was noted that turning movements, travel times, and vehicle classification need to be added to the ADUS information. Again, Dave agreed to review and provide input by 3/9/2007. It was also noted that details as well as the high level requirements would be helpful at this time.
18. After some discussion of the format for the requirements matrix, Bruce agreed to re-work requirements matrix to simplify the use by public agencies to better clarify when the optional elements needed to be included.
    a. Need to make it clear that if a top level requirement is selected, then lower level items must be considered for selection. If not, then they must be ignored.
19. There was some discussion regarding the conformance statement (see version 3 ConOps); it was generally felt that it was acceptable.
20. It was noted that the WSDL must be separately defined; the XML is suitable for both 2306 and DATEX – therefore the XML should be protocol independent.
21. It was noted that the backward compatibility statement could not probably be met. While it was a goal, there are likely to be instances where errors in V2.1 had to be corrected in a manner that is unlikely to be backward compatible. The point was that changes should not be made arbitrarily and that each issue of non-compatibility needed to be fully vetted by the committee and fully described in the new standard including a description of the problem and the solution used. It was recommended that we should look for ways to extend the standard to accommodate the changes rather than replace existing elements or messages.
22. There was some discussion of how to extend the standard; this is a requirement of Version 3, but it was noted that such extensions will create a situation of non-interoperability.
23. There was some discussion of the document heading numbering. The document headings of Version 3 will not match numbering of 2.1. In addition the numbering of 3.0 will change for during development (as sections are added or deleted). It was noted that the initial version of the requirements had attempted to match the numbering of needs and requirements where possible to simplify the review process, but that future versions of the documents will start to diverge from this (as sections are added or deleted).
24. It was noted that the Version 1 of the requirements document will now become the baseline and that all changes made to the version 1 sent to the committee will now be shown using Microsoft change markings.
25. Parking lot issues – posted for further discussion; several items were brought up during the meeting for which there was no consensus on how to proceed. They are described below,

and the committee members as asked to review and provide suggestions and comments to the general committee for consideration.

a. How do we address the issue of "downstream" data restrictions? With the trend to a mixture of public and private data collection services, there are likely to be restrictions on the use of the data collected from private sources; how is this "limitation" to be conveyed to the receiving center so that the data agreements for its use are honored. Discussion: there may be restrictions on the use of traffic situation data (e.g. travel times, speeds) if it is provided by a private source. This may include a time restriction (not for 5 minutes) or an absolute restriction (may not be exported). If this restriction is construed to mean dissemination to the public, it may still allow the center(s) to use the data for operations (e.g. the deployment of messages) or management strategies (diversions, timing plan selection, metering rates, etc.). This is a real requirement and needs to be addressed at some point.

b. Security – the current standard uses "tokens" and it appears there may be in an incomplete definition and design for the security management; most centers employ other means (login, VPN, etc.) for security management. What should C2C address – and where?

c. What is the purpose of the detector inventory information? This needs to be re-visited!

The meeting adjourned after a discussion of the schedule for the near-term deliverables and meetings. This is summarized in the slide shown below:

This schedule has changed from the previous plans. The committee felt that it would be better to save the final face to face meeting for the second version of the detailed design. They also felt that it would take a full day teleconference for each review which was best handled by scheduling 4 hours for each of 2 adjacent days (noon to 4 PM). This also represented a further slippage in the schedule, but the size of the documents clearly warranted longer review times for the members and longer teleconferences for the review process.