

Meeting notes for July 26, 2004 I++ DME implementer's conference call

Meeting secretary: John Horst
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July 26, 2004

Name	Organization	Present
Ray Admire	Lockheed Martin	
Manfred Becker	Zeiss	
Perluigi Borgogno	Wilcox Associates	
Andrew Cheetham	LK	
Dick Engel	GMPT	
Joe Falco	NIST	✓
Sandy Gill	Ford	
Swen Haubold	Mitutoyo	
Erhardt Heft	Zeiss	
John Horst	NIST	✓
René Keller	Metromec	✓
Tom Kramer	NIST	✓
Chuck Leckenby	Tecnomatix	✓
Jerry Lewis	Tecnomatix	✓
Mike Martini	General Electric Transportation	
Günter Moritz	Messtechnik Wetzlar	
Michel Penlae	Wilcox Associates	
Chiratana Pot	Tecnomatix	
Walter Punegam	Zeiss	
Josef Resch	Zeiss	✓
Bill Rippey	NIST	✓
John Rosser	Renishaw	
Ken Sheehan	Entelligence	
Dave Smith	LK	
Rob Stewart	Daimler-Chrysler	
Keith Stouffer	NIST	
Tim Taylor	General Electric Transportation	
Jose Torres	Zeiss	✓
Mark Vinson	Boeing	
Bob Waite	Daimler-Chrysler	
Betsy Weddendorf	General Electric Transportation	
Martin Wimmer	Zeiss	
Ron Wood	GMPT	
Ken Woodbine	Hexagon	
John Wooten	LK	

1 IMTS demo

John reported on various items relating to the planned demonstration of I++ DME interoperability at the International Manufacturing Technology Show (IMTS) to be held in Chicago Sept 8-15, 2004. Cooperative Research and Development Agreements (CRADA) are necessary for NIST to work with client-side software on-site at NIST. The Metromec CRADA has been signed and René reported that the software and dongle have been sent to NIST. Both Metrologic and LK CRADAs are nearing completion.

The first attempt to run the demo DMIS program from NIST on a Zeiss CMM in Germany via modem experienced what appears to be a communications failure. NIST expects to resolve this problem soon and recommence testing with the Zeiss server.

René pointed out that he could do interoperability testing over the Internet with NIST. John pointed out that this should be possible from NIST without firewall issues on the NIST side (since NIST has done a similar test before).

John pointed out that remote demos for all client/server connections are of highest priority in order to identify interoperability problems as soon as possible. Josef said that implementations that are only compatible with I++ DME version 1.3, will most likely have serious interoperability problems, particularly when it comes to syntax such as MaxSpeed and Speed.Max. I seemed generally agreed that everyone will seek to be version 1.4 compliant. Bill will contact participants about this "decision." Jose mentioned that their Zeiss server is 1.3 compliant, but should be no problem to go to 1.4. Someone pointed out that Metrologic's implementation is 1.3 compliant, so NIST will seek to resolve this issue with Metrologic.

Bill pointed out how important it will be to have on-site help from all participating vendors September 2-4 and September 7 at the IMTS show, so that we can set things up and get everything working together smoothly.

John said that CMM delivery to the IMTS is being handled by the CMM vendors themselves through the IMTS management company (AMT). He mentioned that we are still hoping to accomplish round robin execution, but we are making this a lower priority.

Current commitments to IMTS participation have been made by the following companies:

Company	Node type
Zeiss	I++ DME Server
Hexagon (Sheffield)	I++ DME Server
Wenzel	I++ DME Server
Metrologic	I++ DME Client
Tecnomatix	I++ DME Client
Hexagon (Wilcox)	I++ DME Client
LK	I++ DME Client
Metromec	I++ DME Client
Zeiss	I++ DME Client
DCS	DML-interpreting SPC software
Delmia	Offline Programming

2 I++ DME and DMIS harmonization

Tom Kramer reported on his attendance at last week's DMIS National Standards Committee (DNSC) meeting. He gave a presentation there of NIST's overall metrology interoperability work, followed by a presentation of I++ DME and DMIS compatibility issues. There was about an hour spent on these presentations and accompanying discussion. The issue of calibration came up in discussion led by Andrew Cheetham of LK. Josef mentioned that he spoke with Lutz Karras about the meeting and Lutz said that it was widely agreed at this DNSC meeting that accuracy things should be on the server side. For example, the DNSC is deleting xray sensing from the DMIS spec. Tom Kramer opined that he did not sense a general agreement of the DNSC to this philosophy (*i.e.*, accuracy stuff only on the server side). At the DNSC meeting, Bob Waite offered to organize a joint I++ DME and DNSC meeting at the IMTS show. Tom Kramer will identify the particular DMIS commands that are not supported in I++ DME.

3 Progress on the NIST I++ DME test suite

John said that NIST plans to have an I++ DME spec version 1.4 compliant test suite completed soon. The next step is to add server-side test cases to the test suite by the end of September, 2004, which will make the test suite more closely approximate a "conformance" test.

4 I++ DME specification

Josef reported the 1.4.1 draft is complete as well as I++ DME group responses to implementers' comments in the excel spreadsheet. He expects Gerd to send these out very soon. Also DMIS/I++ DME use cases were sent to Tom in preparation for the DNSC meeting. Jerry asked if 3D known scanning is supported in I++ DME. Tecnomatix has submitted a use case on this. Josef pointed out that it arrived too late prior to the Stuttgart meeting, and since it will clearly be an issue for camshaft functionality, and since optical sensors are a higher priority, the issue of 3D known scanning will be dealt with in due time.

5 New and outstanding action items

- NIST will identify DMIS commands that are not supported in I++ DME
- NIST will seek to resolve the version number incompatibility issue with I++ DME implementations on both the client and server sides
- Bob Waite will organize a joint I++ DME and DNSC meeting at the IMTS

Our next meeting is planned for August 9, 2004. I look forward to speaking with you then!