

**IEEE 1451.4 Standard Working Group
Telephone Meeting, July 26, 2002
Meeting Minutes, issued July 27, 2002, approved with edit, Aug 1, 2002**

Chair: T. Licht

Secretary: P. Hufnagel

Attendance:

Jorgen Baekke, 1451dot4@baekke.com

Mike Dillon, Modal Shop, Mdillon@modalshop.com

Garritt Foote, National Instruments, Garritt.Foote@ni.com

Fernando Gen-Kuong, Endevco, Fernando@endevco.com

Ed Herceg, Macro Sensors, eeh@macrosensors.com

Paul Hufnagel, Kistler, Paul.Hufnagel@kistler.com

Charles Jones, Edwards AFB, Charles.Jones@edwards.af.mil

Kang Lee, NIST, Kang.Lee@nist.gov

Torben Licht, B&K, Trlicht@bksv.com

David Potter, National Instruments, David.Potter@ni.com

Bill Schuh, Watlow, BSchuh@watlow.com

- 1) Minutes of Previous Meeting
 - a) Minutes of the 07-18-02 meeting, approved.
 - b) Question raised on the advisability of hotlinks in the minutes, since they require access to the Internet. The alternative is to attach all the presentations, which results in megabyte sized minutes, which fail to pass some mail servers. The Group reaches a consensus, to retain the hotlinks.
- 2) Clause 5, TEDS: P. Hufnagel
 - a) Editing to be done due to development of Clauses 6 and 7. Sub-clause 6.2.2, on Checksums, will be referenced under Sub-clause 5.1.6.
 - b) New memory map to be included in Clause 5, replacing the one presently contained therein.
 - c) **Action: P. Hufnagel will edit Clause 5.**
- 3) Clause 6 discussion: T. Licht
 - a) A statement will be added to Sub-clause 6.1, defining the .tdl file as "an 8-bit ASCII text file". **Action: T. Licht will edit Clause 6.**
- 4) Clause 7 TDL Draft: C. Jones
 - a) New Draft, from C. Jones, and suggested technique for describing units, by G. Foote. Units will be discussed on Aug 1, and the Draft discussion will continue Aug 15.

http://www.1451dot4.com/presentations/071802/Chap_7_DL_by_CHJ_020717.doc
http://www.1451dot4.com/presentations/071802/1451dot4_units_suggestion.doc

 - b) The Draft contains a list of all the changes included in the current edition, which are discussed one by one.
 - c) 7.2.1: Sub-template ID is shown within the syntax of the Sub-template code.
 - d) The IEEE style convention dictates that references to clauses are by number only, i.e. "the change to 7.2.1", not, "the change to Clause 7.2.1".
 - e) 7.1.4: Clause 7 will state that TDL does not treat Basic TEDS, and that the 1st 66 bits, comprising the 64-bit Basic TEDS and the 2-bit selector, are not defined therein.
Action: C. Jones will edit Clause 7.
 - f) 7.2.1.2: Reference needed to manufacturer codes defined in Clause 6 and usage of mfr/user codes. Cite the Clause treating user templates and 7.2.3, validation checksum.
 - g) 7.2.4: UGID defined as TDL version number.
 - h) All references to "property name" changed to "property tag".
 - i) 7.4.10.2.3 Usage of recal period will be moved into an annex.

- j) 7.4.2: Question on the definition of “measurandID”. It is an arbitrary identification of a transducer, by the user, using text or numerals, in as few bits as possible.
 - k) 7.4.2: “%undef” command removed.
 - l) Question on which characters should be defined to the last 5, of the “chr5” codes. Punctuation marks have been suggested, as well as Internet characters, or to just mark the codes as reserved. Suggestions should be forwarded to T. Licht.
 - m) 7.4.5: The 16-bit Unicode has been added as “string 16”.
 - n) 7.4.5.3.5: Definition added for a “single” (single precision floating point number).
 - o) Comments via email, to C. Jones, are solicited.
- 5) Clause 9, T-Block/API: C. Lopez
- a) No discussion today.
- 6) Sub-Group on Force Transducers: D. Potter
- a) No report.
- 7) Template Organization: G. Foote
- a) M. Dillon IEPE pressure template, proposed for addition to the IEEE list of templates.

[http://www.1451dot4.com/presentations/071102/IEEE IEPE Pressure Template.tdl](http://www.1451dot4.com/presentations/071102/IEEE_IEPE_Pressure_Template.tdl)

 - b) Other user or manufacturer suggestions on the requirements for a pressure template are solicited.
 - c) New tags, “linearity(alt)” and “sensitivity(alt)” have been added.
 - d) Pressure calibration is typically done at full scale and a second point.
 - e) Linearity may be defined or described in a number of ways.
 - f) Action: M. Dillon will prepare definitions for the new tags, for the next meeting.**
- 8) Manufacturer Codes: T. Licht
- a) T. Licht has drafted a petition letter to IEEE, to assume administration of manufacturer codes, lists and 1451.4 Templates.

http://www.1451dot4.com/presentations/072502/Dot4_Manufacturer_List_V21.doc

 - b) Questions on fees to be charged for lists and templates disseminated by IEEE, according to the request of the Working Group. The wish of the Working Group is that users be charged no fee for the service, and that administration costs be borne by the manufacturers publishing the lists or templates at the IEEE site. **Action: M. Dillon will revise the letter to add a request to this effect, and forward it to K. Lee, who will address the letter to the proper IEEE group, for consideration.**
 - c) The Working Group must define a process, within the Standard, which allows the lists and templates to be revised and maintained, without requiring a revision to the Standard.
 - d) The IEEE 1451.2 Standard contains such a procedure, which may be a model for 1451.4:

[http://www.1451dot4.com/presentations/072502/Extension TEDS Procedure.pdf](http://www.1451dot4.com/presentations/072502/Extension_TEDS_Procedure.pdf)

- 9) Action Items:
- a) Secretary has compiled a list of Action Items for the release of the Standard, as discussed at the Austin Meeting. The Secretary will keep the list current.

http://www.1451dot4.com/presentations/053002/1451dot4_ACTIONS_30_May_02.doc

- 10) New Business:
- a) “Instead of a separate 1451.4 booth for the Sensors Expo, Boston, Sept 24-26, 2002, National Instruments proposes that 1451.4 technology be demonstrated in vendors’ standard booths. NI will plan to move the large machine demo into their booth, and demonstrate interoperable plug and play with sensors from multiple vendors. This will

avoid the need for a second booth, and probably increase the exposure. After discussion, the Working Group thought that this was a good approach.”

Any Members attending the Expo can obtain admission to the sessions, from K. Lee.

- b) A FTF meeting on Friday, 09-27-02, and possibly Saturday, 09-28, may not be desirable, and will be discussed in mid-August, to determine whether it will be held.
- c) Patents pertinent to the Standard should be discussed periodically, so that new Members are made aware that the Working Group needs to report, to IEEE any patents, which might affect the general use of the Standard. **Action: W. Schuh will email an abstract of the Watlow patent on memory in sensors, to the Working Group.**

11) Next Meeting:

- a) Next Telcon: Thurs, Aug 1, 2002, 2:00 pm EDT
- b) Adjourn: 4:00 pm EDT.