

**IEEE 1451.4 Standard Working Group
Telephone Meetings, February 20, 2003
Meeting Minutes, issued Feb 21, 2003, approved Aug 14, 2003**

Chair: T. Licht

Secretary : P. Hufnagel

Attendance:

Mike Dillon, Modal Shop, Mdillon@modalshop.com

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The current Draft is 1451.4/0.9977, Jan 30, 2003.

1) Cover, Contents and Introduction:

- a) Complete.

2) Clauses 1, 2 and 3:

- a) Complete.

3) Clause 4:

- a) Complete.

4) Clause 5:

- a) Corrections submitted by C. Summey. On review, most of the changes are of a grammatical nature, and may be accepted. Figure 4 has been modified. The block title terminology "1451.4 Instrument" has been replaced by "measurement/control device". No strong opinions voiced for either terminology, so the Figure will be accepted as edited, with the addition of "IEEE 1451.4" and capitalization of the new block title. Also, one of the graphic elements appears to have been modified and needs to be restored, and more space is needed between the two nodes depicted. **Action: T. Licht will edit the Draft.**
- b) 5.3: Question on where exactly in the Draft the data format is defined. Possibly 6 and Annex A, since the template defines the format, but the template definition is distributed in several clauses. **Action: T. Licht will edit the Draft.**
- c) 5.6: Edited for clarity of reference to Figure 4.

5) Clause 6:

- a) Complete.

6) Clause 7:

- a) 7.2.5: Does the validation keycode work? The algorithm appears to be correct. **Action: T. Licht and G. Foote to supply an example. The example cannot occupy a lone sub-clause, according to the Style Manual, but must be integrated into the clause above.**

7) Clause 8:

- a) Complete.

8) Clause 9:

- a) **Complete. To be retained.** Some discussion heard on the rationale for the removal of the T-Block from the 1451.3 Draft, for possible inclusion into 1451.0, at a later date. Opinion voiced that the T-Block is integral to the industry acceptance of 1451.4 products, and that companies can not afford to wait with products for the release of yet another standard, which may be several years away.

9) Annex A: Template Listing (D. Potter, G. Foote)

- a) The templates for preamps and microphones do not presently fit together well, two templates cannot be linked dynamically and the reference frequency needs to be selectable. It is desirable to add a property for "Associated Template" possibly by using an include file as a mechanism for appending one template to another. The case of a preamp with interchangeable microphones makes this an advantage.
- b) T. Licht has proposed a combined mic/preamp template and an accel/preamp template using a select case to access the microphone- or accel Basic TEDS. One drawback may be the need for more than 256 bits, restricting the template to use with larger memories. The use of select cases in the template avoids changes to the flowchart in Clause 6, by avoiding the addition of one bit to the selector of descriptor. Selector bits are part of the TEDS, and are resolved by the template, during TEDS parsing. Use of the select case may also avoid an association with Basic TEDS, avoiding effects on Clause 9. A Basic TEDS property will need to be added in the templates, affecting Clause 7 and annex A. The charge amp portion of the template defines "gain", while the accel portion of the template defines "sens@ref", which is the outcome of gain plus element sensitivity. The accel Basic TEDS must be written in the preamp template, to associate the two components. This is accomplished with the "Basic TEDS" property, which needs to be added to the property table. This template should be adaptable to force sensors and mics. **Action: With no dissent voiced by the Working Group, T. Licht will add the new template to the Draft.**
- c) The concept of UTID and UTIDT need to be revisited, since these are useful tools for quickly identifying and locating templates.
- d) Total bit counts on all templates are in question. A note as to the total available bit count should be added. **Action: C. Jones will determine bit count when the templates are run through the grammar checker. T. Licht will add a note on the available bits in memory.**

10) Annex B: Template Properties (D. Potter, G. Foote)

- a) B.5.3: Question on the need for examples to be added. No strong opinion expressed as to the need for examples. **Action: T. Licht and D. Potter will place several examples in the sub-clause, if they can be cut and pasted from the templates. Not every paragraph will have an example attached.**

11) Annex C: TDL Formal Grammar (C. Jones)

- a) C.2: All of the templates need to be tested successfully for adherence to the syntax rules in C.2. **Action: C. Jones.**

12) Annex D: Sub Template File Checksum Example (T. Licht)

- a) A C++ program for checksum has replaced the Visual Basic program previously used. The only comment is that the code should contain comments.

13) Annex E: Dallas Semiconductor DS2430 (P. Hufnagel)

- a) Complete.

14) Annex F: Dallas Semiconductor Family Codes (D. Smiczek)

- a) Suggestion to replace Fig 2, an XML Configuration file example, with XML Configuration files from Annex G. On discussion, due to the informative nature of

Annex F and normative nature of Annex G, this is not a good idea. **Action: T. Licht to query D. Smiczek on the advisability of changing Annex F, Figure 2.**

- 15) Annex G: 1451.4 XML device description schema (C. Lopez)
 - a) Complete.
- 16) Annex H: MicroLAN Communication (D. Smiczek)
 - a) Complete.
- 17) Annex I: IEEE Template Change Procedure (**K. Lee**)
 - a) Working Group decision made to define the issuing authority for manufacturing numbers and template authorization, etc. as "the 1451.4 Working Group or its designee". **Action: T. Licht will insert this statement where needed.**
 - b) The IEEE Registration Authority has been contacted for a second time, for a ruling on an appropriate issuing authority and procedure. A response from the RAC indicates that this matter will be discussed during their March meeting. **Decision of the Working Group is to release the Draft for ballot, with the procedures as they are presently, as our best guess, and to revise them after ballot, if the RAC has other inputs, in order to avoid delaying the release of the final Standard.**
- 18) Annex J: IEEE P1451.4 v0.9 Reference Data (**T. Licht**)
 - a) Complete.
- 19) Annex K: Enumerated Listing of Manufacturer Codes (M. Dillon, K. Lee)
 - a) Complete.
- 20) Annex L: IEEE 1451.4 TBOM Schema (C. Lopez)
 - a) Complete.
- 21) Annex M: Bibliography (T. Licht)
 - a) Complete.
- 22) Annex N: Dot 1 Interface (C. Lopez)
 - a) Not included in this Draft, may be added at a later time.
- 23) **Adoption of the Draft**
 - a) IEEE Editorial Review: The Draft was released for IEEE Style Editing, on Jan 15, 2003. **The IEEE Editorial Review Committee has approved the Draft**, with the addition of a new title page.
 - b) The original PAR was forwarded to T. Licht, by IEEE, for confirmation of continued validity. **Action: T. Licht will send a letter confirming validity of the PAR.**
 - c) Hewlett-Packard patent: The Working Group received a letter from the H-P legal department, allowing implementers of the 1451.4 Standard to license H-P patents. This letter is believed to be in the possession of S. Chen, but may need to be renewed, with the separation of Agilent Technologies from Hewlett-Packard. **Action: K. Lee has asked whether the letter is still with S. Chen. No reply, to date.**
 - d) Dallas Semiconductor products: **Action: T. Licht to request a letter permitting the unrestricted use of Dallas products by anyone implementing 1451.4 systems.**
 - e) IEEE Registration Authority: The IEEE Registration Authority will meet next on March 17, 2003, at which time the needs of the 1451.4 Working Group will be discussed. The release for ballot must go ahead prior to this meeting, and any comments must be dealt with as ballot comments. See 17)a) and b).
 - f) 1451.4 Ballot Committee: Registration for the Ballot Committee closes February 20, 2003. **Action: K. Lee has requested a list of ballot committee members.**

- g) Mailing Addresses: **Action: All current 1451.4 Working Group members, forward your mailing address to K. Lee, to be forwarded to the IEEE for shipping of your copy of the Standard, when released.**
- h) 1451.4 Summary: As a guide to balloters, a summary of the Draft should be forwarded with the Draft. **Action: K. Lee and T. Licht will prepare a summary of the Draft.**

24) Upcoming Events:

- a) Sensors Expo, June 2003: On Tuesday, June 3, an afternoon session on practical uses of 1451.4 is being considered. This will follow Jamie Wiczer's morning session on Smart Sensors. An email announcement of the Smart Sensors session has resulted in worldwide interest, with several hundred responses from editors and publishers.

25) Next Meeting:

- a) **Meetings will continue at 3:00pm EST, Tuesdays and 2:00pm EST, Thursdays, to allow final polishing of the Draft and completion of the Annexes, following the presentation of the Draft to the Editorial Review Board.**
- b) **The next meeting will be Thursday, Feb 27, 2003, at 2:00 pm EST.**
- c) Adjourn: 3:24 pm EST.