

Minutes – St. Louis – July 12, 2001

Brian Barnt	L5192	AJ Ireland	Digitrax
Ed Majury	Atlas	Britt Harrington	Railroad & Co.
Peter Ziegler	Zimo	Jim Scorse	NCE Corp.
Michael Greene	L5433	Thomas Birner	Roco
Rutger Friberg	101462	Karl Kobel	Wangrow/ K ²
David Jasper		Bill Attaras	WS Attaras Eng.
John Kabat	096099	Hans Tanner	Digitoys
Carl Harcourt	Kam Industries	Daniel Rufener	Digitoys – Europe
Matt Katzer	Kam Industries	Steve Dominguez	Soundtraxx
Ken West	024948	Strad Bushby	040257
Bernd Lenz	Lenz Elektronik	Eric Bishton	
Armin Bacher	Digitrax		

The DCC Working Group meeting was held in the TWA Dome conference rooms at 8:00 am – 12:00 pm on Thursday, July 12th, Room 161, Door A.

1. Review of Spring Meeting

Need to add Hr. Dahl's presentation to the minutes; Rutger will assist in getting notes from Hr. Dahl. (Comments received 30-Aug-01 in German).

2. Comment Review Period for Proposed RPs

The proposed changes to the DCC Recommended Practices have been available on the NMRA Web site since April 6th. The official 10 week review period ended 20-Aug-01. A summary of all comments received will be posted to the dcctech@cecontechology.com mailing list.

3. Topic 951001 – RP-9.1.2 Control Bus

Additional information about the Driver/Receiver Input type has been received from CVP and Digitrax. Karl Kobel will incorporate both sets of information. After review by CVP and Digitrax, the RP will be published for comment.

4. Topic 9910241 – Analog Output Instruction

The WG discussed the Analog Output instruction. Steve Dominguez was volunteered to revise the proposal. After some discussion the WG adopted Steve's revisions (256 function of 256 values) for the Analog Output Instruction. (The revised proposal is attached.)

5. Topic 0008031 – Accessory Decoder connector for turnouts and Signals

Rutger is requesting comments for the Spring Meeting (in Vienna). Both Maerklin and Flieschmann have commented. Bernd reports that there is some development work in MOROP on a standard layout wiring approach. If anyone has comments, please send them to Rutger.

6. Topic 001031 – Accessory Decoder CV Instruction

This topic was tabled from the Chicago 2000 meeting. Bernd has not had time to work in this area. (Still tabled.)

7. Topic 0106171 – Power Station Control Instruction

A proposal was received from Karl Kobel for a Power Station Control Instruction. This topic was discussed, and several points were raised:

- Add a footnote to indicate that the standard limit the maximum voltage to 22 volts peak.
- Modify each discussion of range to show a real formula. Karl intended a value of 0 to be 5 volts.
- Command 'FE' a better choice than 'FF'.
- Make the command a 6 byte packet: Preamble 0 11111110 0 00000001 0 P P P P P P P P etc.
- This command is only issued over the Control Bus, not on the track.

More discussion centered around the number of instruction packets required before a change should be made. There is concern about the weaknesses of XOR error byte with 6-byte packets. AJ suggested 4 packets be sent, at least two must be received before a change is made.

A recommendation was made that the RP include a recommendation for some sort of feedback when the instruction is executed.

Karl needs this input by 20-Aug, and he will post the revised proposal prior to the Chicago meeting. Discussion will continue there.

8. Topic – Signal Decoders

Bill Attaras is working on the translation of 2 documents on Euro signalling. Bernd has German signal information (160 “items”). Hans R. Tanner suggested we make sure that DCC signal commands includes the ability to reflect changes speed, direction, and function. Rutger informed us that Microsoft Train Simulator has some European signal information, and provided a contact name (Barry Sanders) at Microsoft.

9. Topic – Bi-Directional Communications

Bi-Directional Communications (Advanced Feedback/Advanced Acknowledgement) was discussed. Some of the discussion centered around Baseline testing; Ken West volunteered to draft a test plan to evaluate bi-directional communications methods. The draft will be posted to the dcctech mailing list. Testing on ‘problem’ layouts was discussed. Another topic was the special requirement for counting responses, the protocol, and documentation for a detector. A reference design for the Zimo method was also discussed. The WG voted to proceed with a test plan (10 yea, 0 nay, 5 abs).

10. Topic 0104191 – Proposed Allocation of CVs

Bernd Lenz proposed allocating more CVs to define the characteristics of a function output over time. Jim S. suggested making the tables ‘indexed’ so multiple tables could be used. Rutger suggested adding capability to save user CV values so that a reset would not be to factory defaults. AJ suggested the indexing scheme be in the manufacturer-unique areas. Stan commented that the indexing schemes might be a good idea if the scheme is standardized and easy to use. Bernd Lenz and Jim Scorese will revise the proposal by 20-Aug-01.

Rutger’s ideas for saving user defaults will be added to the agenda for the Fall (Chicago meeting).

11. Topic 0107122 – Programming Requirements (RP-9.2.3, Section F)

The WG discussed the remaining issues with RP-9.2.3. The first area discussed was programming methods. *Comments in brackets [] were added to the minutes for clarity.* The first vote: “Ignoring backward-compatibility, the long term direction [of the Working Group] is that [the] requirement will be that the decoder will only be require to support direct mode [method of programming].” The recorded vote was 16 yea, 0 nay, 2 abstentions (abs.). A second vote was made: “By a certain date, Command Stations or Programmers that support RP-9.2.3 must support Direct CV Programming.” This vote was 14 yea, 0 nay, 2 abs. (Several people had left the meeting during these discussions.)

The second area was discussed at some length. Ken West proposed “The Programming Track voltage must not exceed 13 volts (peak). The programming track voltage must exceed 7 volts (peak) with a resistive load of 180 mA”.

12. Topic 0107121 – Working Group

Thomas raised the discussion of whether there should be two different meetings, one for Marketing, and one for technical discussion. Thomas did not have any suggestions, but would us to think about it.

Housekeeping

The Fall meeting (in Chicago) this year is September 7th, at 7 pm.

The Spring meeting will be hosted by Peter Ziegler of Zimo, in Vienna (Wien) Austria, tentatively scheduled for April 2002.

The 2002 Fall meeting will **not** be held in conjunction with the National Model and Hobby show in Chicago. A volunteer host is needed.