

IEEE 802.17

State Table Ad Hoc

Conclusions

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Observations

- Draft 1.1 State tables are a good start, but do not give the required level of specificity required in a standard
- Many terms are undefined or buried in text
- Source of input conditions not always known (Is it from one ringlet, both, or both + the MAC?)
- Precedence for evaluating terms not always clear
- Many conditions and transitions are not yet described within the existing state tables

Overall Conclusions

State tables must be

- Complete
 - All events and all transitions must be contained within the state tables
 - State tables must explicitly correlate to the MIB
- Unambiguous
 - A formal language used to express inputs and transitions
 - The source of each input known
 - The range of values for each input variable known
 - Precedence of actions explicitly stated
- Clear
 - All terms defined and easy to find in the draft

before we approve the draft

Specific Recommendations

Definition and Specification of Terms

- All terms used by the State Tables are to be defined in Clause 3 or by its clause if only used locally
- Range of values for inputs/outputs of the State Table is to be specified directly in definitions or by reference to Clause #

Specific Recommendations

Required Precision

- Format used to express conditions and actions will be a formal language such as C-code

Correlation to MIB

- State tables and MIB should point to each other on a term by term basis.

Specific Recommendations

Order of Execution

- The draft will explicitly state that the precedence used in evaluating State tables is from the top down, unless otherwise specified
- Include in explanatory description of State Tables any possibilities of race conditions.
- All timing assumptions used in evaluating the state tables will be explained in the text associated with the State Tables.

Motions for Thursday

- All RPR operations must be described within the state tables
- C-Code will be used to describe inputs / events in the state table
- All terms used within the state table will be defined in a Definition section of the draft (Clause 3 or at beginning of local clause)

Motions for Thursday (cont.)

- The ranges of all terms used in the state tables will be described within the definitions or by pointers within the definitions
- The state tables and MIB will cross reference each other on an item by item basis