

Interpretation Number: 1-07/02 (1000BASE-T Autoneg Tx add-on)
Topic: Autoneg Transmit State diagram add-on for 1000BASE-T
Relevant Clauses: 40C-2
Classification: Not a request for interpretation

Interpretation Request

In Figure 40C-2 (Autoneg Transmit State diagram add-on for 1000Base-T), state Software_NP_TX and Software_NULL_TX can be grouped as follow.

The condition of Self-Transition in Software_NP_TX can be changed to :

$(mr_page_rx = true * next_page_loaded = true * ack_finished = true)$

the condition from Software_NP_TX state to Software_NULL_TX state can be changed to :

$(mr_page_rx = true * next_page_loaded = true * ack_finished = true)$

and both state can be called Software_NP_TX (for Null page and additional pages) and the new state will include :

```
mr_np_tx[NP] <= mr_np_tx_reg[NP];  
mr_np_tx[MP] <= mr_np_tx_reg[MP];  
mr_np_tx[11:1] <= mr_np_tx_reg[11:1];  
mr_next_page_loaded <= next_page_loaded;
```

of course the software will be responsible to load $mr_np_tx[MP] = 1$ for NULL page and $mr_np_tx[1] = 1$;

like this the NULL page will viewed as normal additional Next-page with different coding.

Interpretation for IEEE std 802.3-2002

This request is being returned to you because it does not constitute a request for interpretation but rather a request to confirm a possible state machine optimization. Generally, an interpretation request is submitted when the wording of a specific Clause or portion of a standard is ambiguous or incomplete. The request should state the two or more possible interpretations or the lack of completeness of the text.

While you refer to Annex 40C, you have not indicated any ambiguity nor lack of completeness of the text but rather seem to have understood the specification and made a suggested optimization. The committee has not judged the correctness of your optimization.