DATE: 22nd July, 2015
NAME: Marek Hajduczenia
COMPANY/AFFILIATION: Bright House Networks
E-MAIL: marek.hajduczenia@mybrighthouse.com

REQUESTED REVISION:
STANDARD: 802.3-2012
CLAUSE NUMBER: 76
CLAUSE TITLE: 76.3.2.5.6 Counters

PROPOSED REVISION TEXT:
1) Change type definition for IdleBlockCount variable from >>32 bit unsigned<< to >>32-bit signed integer<< in 76.3.2.5.6.
2) Add >>IdleBlockCount <= 0<< assignment in the INIT state in Figure 76-16.

RATIONALE FOR REVISION:
1) Variable IdleBlockCount is set to value >>-1<< in Figure 76-16 in the state RECEIVE_DATA_BLOCK, which would typically translate to the value of 0xFFFFFFFF for an unsigned integer. Additionally, given implementation specific character of unsigned integer overflow, there is no guarantee that operation >>IdleBlockCount++<< in the RECEIVE_CTRL_BLOCK state in the same figure would produce the expected value of 0. To correctly represent expected range of values [-1,0,1,...], the variable IdleBlockCount needs to be of a signed integer type.
2) Variable IdleBlockCount is not initialized explicitly within its definition or the state diagram in Figure 76-16.

IMPACT ON EXISTING NETWORKS: None, it is just a change in the definition of the variable type.

Please attach supporting material, if any
Submit to:- David Law, Chair IEEE 802.3
and copy:- Adam Healey, Vice-Chair IEEE 802.3

At: - E-Mail: stds-802-3-maint-req@ieee.org

------------- For official 802.3 use -------------
REV REQ NUMBER: 1282
DATE RECEIVED: 22nd July, 2015
EDITORIAL/TECHNICAL
ACCEPTED/DENIED
BALLOT REQ'D YES/NO
COMMENTS: XX-Xxx-XX Ver: D1.0 Status: R

For information about this Revision Request see -
http://www.ieee802.org/3/maint/requests/revision_history.html#REQ1282