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2 | REVISION REQUEST |  
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4 DATE: 10/9/2024  
5 NAME: Luisma Torres  
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9 REQUESTED REVISION:  
10 STANDARD: 802.3cz  
11 CLAUSE NUMBER: 166.6.4.8.4  
12 CLAUSE TITLE: BER calculation  
13

14 PROPOSED REVISION TEXT:  
15 In the third bullet, replace  
16 "Calculate the histogram of sequence  $s$ , where the value of each bin  $h(i)$   
17 is normalized to relative probability, such that  $h(i) = c(i)/N_h$ , where  
18  $c(i)$  is the number of elements in the bin centered in  $e(i)$  of width  
19  $\Delta e = (\max(s) - \min(s))/N_h$ , and  $N_h$  is the number of bins of the  
20 histogram of sequence  $s$ , which are selected to be greater or equal to  
21 500."  
22 with:  
23 "Calculate the histogram of sequence  $s$ , where the value of each bin  $h(i)$   
24 is normalized to relative probability, such that  $h(i) = c(i)/N_s$ , where  
25  $c(i)$  is the number of elements in the bin centered in  $e(i)$  of width  
26  $\Delta e = (\max(s) - \min(s))/N_h$ ,  $N_s$  is the number of elements of the  
27 signal, and  $N_h$  is the number of bins of the histogram of sequence  $s$ ,  
28 which are selected to be greater or equal to 500."  
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30 RATIONALE FOR REVISION:  
31 The proposed normalization of each bin in the histogram is wrong because  
32 the number of elements in the bin  $c(i)$  shall be divided by the number of  
33 elements of the signal  $N_s$ , and not by the number of bins of the histogram  
34  $N_h$ .  
35 This error was already detected in the IEEE 802.3cz Task Force comment  
36 resolution process of Draft 2.1 (see late comment #47 in  
37 [https://www.ieee802.org/3/cz/comments/Comments\\_3cz\\_D2p1\\_With\\_Resolution.p](https://www.ieee802.org/3/cz/comments/Comments_3cz_D2p1_With_Resolution.pdf)  
38 [df](https://www.ieee802.org/3/cz/comments/Comments_3cz_D2p1_With_Resolution.pdf), but the resolution replace the number of samples of the sequence  $s$   $N_s$   
39 by the number of bins of the histogram of sequence  $s$   $N_h$ , instead of  
40 adding the number of bins of the histograms of sequence  $s$   $N_s$ , as required  
41 in this maintenance request.  
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43 IMPACT ON EXISTING NETWORKS:  
44 None  
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2 |Please attach supporting material, if any
3 |Submit to:- David Law, Chair IEEE 802.3
4 |and copy:- Adam Healey, Vice-Chair IEEE 802.3
5 |
6 |At:- E-Mail: stds-802-3-maint-req@ieee.org
7 |
8 | +----- For official use -----+
9 | | REV REQ NUMBER: 1443
10 | | DATE RECEIVED: 10 September 2024
11 | | EDITORIAL/TECHNICAL
12 | | ACCEPTED/DENIED
13 | | BALLOT REQ'D YES/NO
14 | | COMMENTS:
15 +-----+
16 | For information about this Revision Request see -
17 | http://www.ieee802.org/3/maint/requests/revision\_history.html#REQ1443
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