LDPC Informal ad-hoc Group Report

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IEEE C802.16e-04/526r1, <http://ieee802.org/16/tge/contrib/C80216e-04_526r1.pdf>

Purpose:

This presentation offers some background information and a progress report of the LDPC ***Informal*** ad-hoc group.

Overview

- IEEE C802.16e-04/526 represents the group consensus on LDPC code features as of 11/10/04
  - This document does not fully reflect the amount of effort and harmonization that has actually occurred and that continues to occur
    - There are far more similarities between the current proposals than differences
    - Substantial performance comparisons have been done since the September meeting (examples included in this presentation)
  - The group has put in place a downselection procedure with a schedule by which we will complete by the January 802.16e meeting

Downselection Schedule

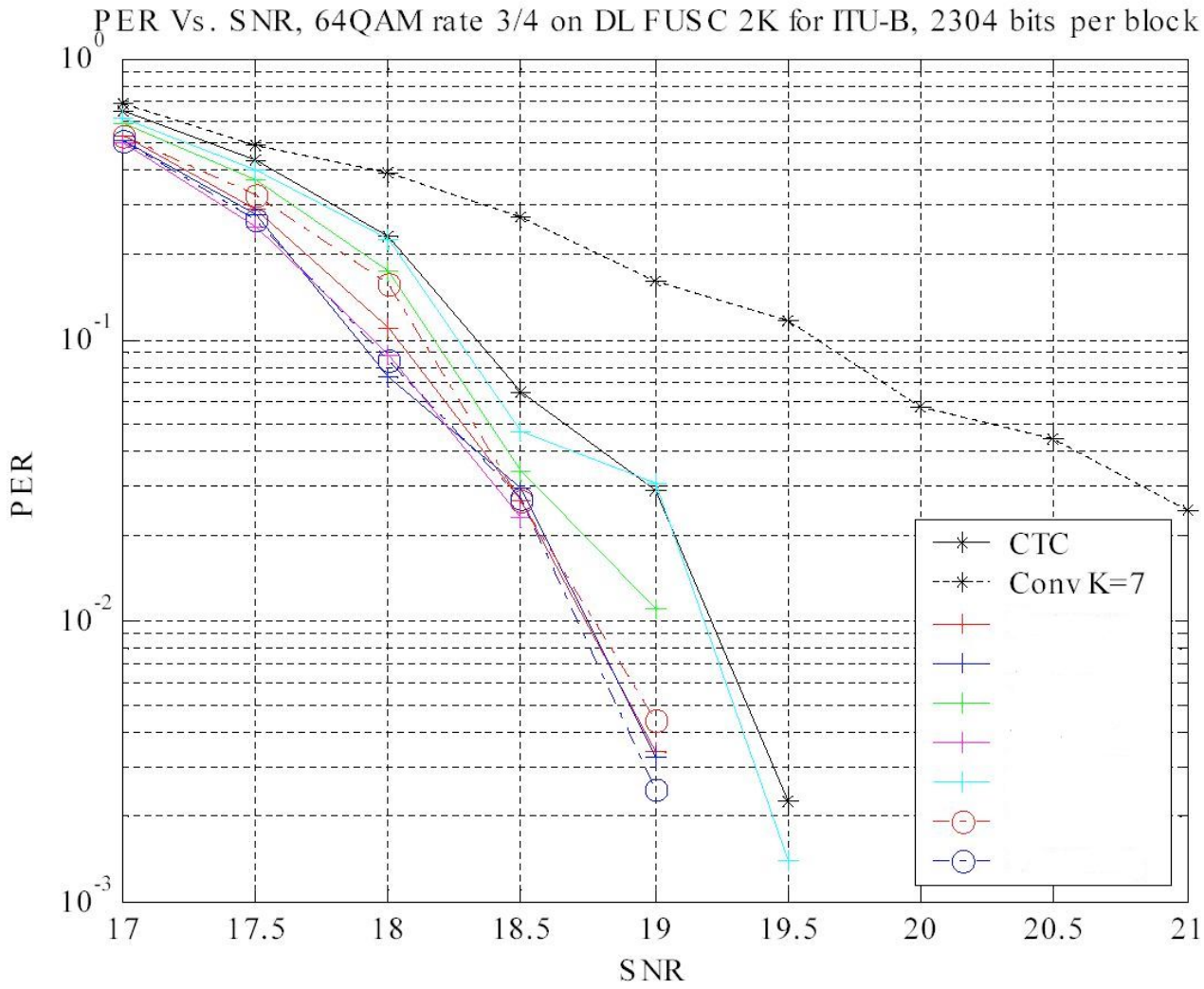
Note: This schedule can be changed on agreement of the group and may accelerate from what is shown.

The eight proposing companies comprising the voting pool are as follows: Intel, LG Electronics, Motorola, Nokia, Nortel, Runcom, Samsung, and Texas Instruments. Voting rounds will take place according to the weekly schedule listed below.

- Nov 22 - First downselection vote - 6 proposals remaining
- Nov 29 - Second downselection vote - 5 proposals remaining
- Dec 6 - Third downselection vote - 4 proposals remaining
- Dec 13 - Fourth downselection vote - 3 proposals remaining
- Dec 20 - Holiday week in US – no votes scheduled
- Dec 27 - Fifth downselection vote - 2 proposals remaining
- Jan 3 - Final downselection vote and confirmation

Comparative Simulation Results - Runcom

These results were obtained using an 802.16 2k-FFT PHY model with the ITU-B channel model. Curves for seven of the proposals plus the CTC and k=7 Convolutional Code are shown.



Comparative Simulation Results - Intel

These results were obtained using an 802.11a PHY model with the ITU-B channel model. Curves for the eight proposals plus a k=7 Convolutional Code are shown.