sometimes referred to in the art as AFEC, is a studied improvement to FEC whereby the system flexibly adjusts the transmission of redundant data packets in response to changing data packet loss rate on the receiving end. As an increase in data packet loss is detected, the system can increase the rate at which redundant data packets are transmitted in accordance with known FEC techniques.

SUMMARY

[6] The following presents a simplified summary of the disclosure in order to provide a basic understanding of some aspects of the disclosure. This summary is not an extensive overview of the disclosure. It is not intended to identify key, or critical, elements of the disclosure or delineate the scope of the disclosure. Its sole purpose is to present some concepts of the disclosure in a simplified form as a prelude to the more detailed description that is presented later.

[7] Disclosed is a method and system for implementing adaptive FEC in a communications network. The relevant portions of the communications network may include a channel, a channel manager, an FEC engine, a Dynamic Multiple Input / Multiple Output Transmission System ("DMTS") and a drop side. The DMTS is a decision-based engine that may be used to decide what link to send a packet over.

[8] In one embodiment, the FEC layer lies between the DMTS and the channel manager. The DMTS engine controls when a FEC parity packet is sent for a given traffic flow. The FEC parity packet may be sent across multiple channels and the FEC can be enabled/disabled for each traffic flow. If FEC is disabled for a given traffic flow, all packets for that flow arriving from the DMTS engine are just forwarded to the channel manager without any FEC management.

[8a] According to the first aspect of the invention, there is provided a communication system comprising: a Dynamic Multiple Input / Multiple Output Transmission System (DMTS) module; and an adaptive forward error correction (FEC) module including, a transmission module for receiving first packets and commands from the DMTS module, generating a parity check for n number of said first

packets, and retransmitting said first packets with the parity check to a channel manager in a transmission direction, and further including a receive module for receiving second packets from the channel manager in a receive direction; wherein the DMTS controls when a parity check is sent for a traffic flow; the parity check may be sent across multiple channels; and the FEC module can be enabled or disabled for each traffic flow.

[9] The following description and drawings set forth in detail certain illustrative aspects of the disclosure. These aspects are indicative, however, of but a few of the various ways in which the principles of the disclosed system and method may be employed and the present disclosure is intended to include all such aspects and their equivalents. Other advantages and novel features of the disclosed system and