Network Coding with Buffer Scheme in Multicast for Broadband Wireless Network

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Abstract : Broadband Wireless Network (BWN) is the promising technology nowadays due to the increased number of smartphones. Buffering scheme using network coding considers the reliability and proper degree distribution in Worldwide interoperability for Microwave Access (WiMAX) multi-hop network. Using network coding, a secure way of transmission is performed which helps in improving throughput and reduces the packet loss in the multicast network. At the outset, improved network coding is proposed in multicast wireless mesh network. Considering the problem of performance overhead, degree distribution makes a decision while performing buffer in the encoding / decoding process. Consequently, BuS (Buffer Scheme) based on network coding is proposed in the multi-hop network. Here the encoding process introduces buffer for temporary storage to transmit packets with proper degree distribution. The simulation results depend on the number of packets received in the encoding/decoding with proper degree distribution using buffering scheme.