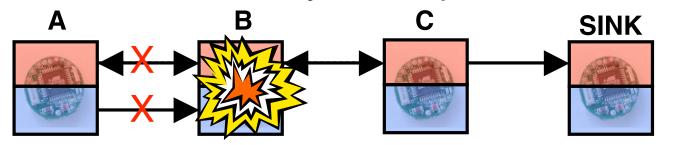
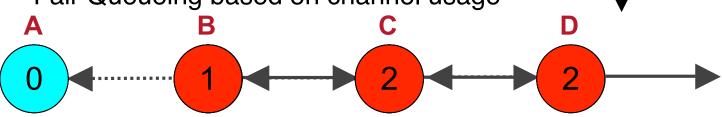
Fair Waiting Protocol (FWP)

Motivation: Vulnerability to inter-protocol interference



- provides isolation and fairness for network protocols at layer 2.5
 - Grant-To-Send mechanism using one a dditional header byte
 - Sender and overhearer should be quiet
 - Fair Queueing based on channel usage

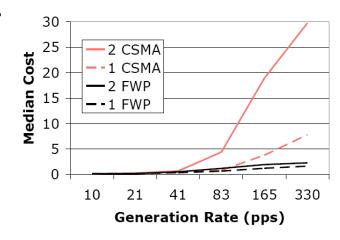


FWP

CSMA

Fair Waiting Protocol (FWP)

- More stable operation even under heavy traffic loads
- Quiet Time Selection
 - The time by which the recipient will respond to transmitted packet



- Protocols must tolerate longer Time-in-Queue
 - e.g. no hard timeouts in network protocols
- Implemented in TinyOS 2.x for CC2420
- More details can be found at the technical report :
 - http://sing.stanford.edu/pubs/sing-06-03.pdf