

IMPLEMENTING A DATA LIFESPAN TIMER FOR ENHANCED DEDICATED CHANNEL TRANSMISSIONS

Abstract

A wireless communication system, which supports enhanced dedicated channel (E-DCH) data transmissions, includes a wireless transmit/receive unit (WTRU) (102), at least one Node-B (104) and a radio network controller (RNC) (106). The WTRU includes a buffer (126), a data lifespan timer (124), a data retransmission counter (130), a hybrid-automatic repeat request (H-ARQ) process (128) and a controller (122). The timer establishes a lifespan for at least one data block stored in the buffer. If physical resources have not been allocated for a data block associated with a lifespan timer that is close to expiration, the WTRU sends an urgent channel allocation request. If physical resources have been allocated, the data block is prioritized for transmission with respect to other data blocks. The data block is discarded if the lifespan timer expires or if the WTRU receives feedback information indicating that the data block was successfully received by the Node-B.

Fig. 1