CLAIMS

What is claimed is:

1. A method for assigning a ~~hybrid-automatic~~ hybrid-automatic repeat request (H-ARQ) process in a wireless transmit/receive unit (WTRU) for supporting enhanced uplink (EU) data transmission, the method comprising:

receiving configuration parameters for a plurality of medium access control for dedicated channel (MAC-d) flows, wherein the configuration parameters include a priority associated with each MAC-d flow and a maximum number of H-ARQ transmissions associated with each MAC-d flow;

selecting data for transmission over an enhanced dedicated channel (E-DCH) based on a priority associated with at least one of the plurality ~~pluarlity~~ of MAC-d flows, wherein data of at least one of the plurality ~~data~~ of ~~a~~ MAC-d flows associated with a highest priority that has data available for transmission is selected;

on a condition that the selected data is new data that was not previously transmitted, assigning an available H-ARQ process for supporting transmission of the selected data, and transmitting the selected data over the E-DCH using the assigned H-ARQ process;

on a condition that the selected data was previously transmitted, ~~retransmitting~~ transmitting the selected data over the E-DCH using the same H-ARQ process that was assigned to previously transmit the selected data;

incrementing a transmission count in response to transmitting ~~or retransmitting~~ the selected data;

determining whether the transmission count is at least equal to a maximum number of H-ARQ transmissions associated with ~~a~~ one of the plurality of MAC-d flows from which the data for transmission was selected; and

discarding the selected data in response to a determination that the transmission count is at least equal to ~~the~~ a maximum number of H-ARQ transmissions associated with ~~a~~ one of the plurality of MAC-d flows from which the data for transmission was selected.

2. The method of claim 1 further comprising releasing the assigned H-ARQ process on a condition that feedback information is received, wherein the feedback information indicates that the transmission of the selected data was successful.

3. The method of claim 1 further comprising retransmitting the selected data on a condition that the WTRU receives feedback information ~~is received, wherein the feedback information indicates~~ indicating that the transmission was unsuccessful.

4. The method of claim 1 further comprising retransmitting the selected data on a condition that no feedback information is received regarding the transmission.

5. The method of claim 1 further comprising retransmitting the selected data on a condition that the transmission count is less than a maximum number of H-ARQ transmissions associated with a MAC-d flow from which the data for transmission was selected.

6. The method of claim 1 further comprising setting the transmission count to zero on a condition that the selected data was transmitted a maximum number of times.

7. The method of claim 1 further comprising setting the transmission count to zero on a condition that the selected data is new data that was not previously transmitted.

8. The method of claim 1 wherein the data is selected by a medium access control for enhanced dedicated channel (MAC-e).

9. A wireless transmit/receive unit (WTRU) for assigning a hybrid automatic repeat request (H-ARQ) process for supporting enhanced uplink (EU) transmission comprising:

means for receiving configuration parameters for a plurality of medium access control for dedicated channel (MAC-d) flows, wherein the configuration parameters

include a priority associated with each MAC-d flow and a maximum number of H-ARQ transmissions associated with each MAC-d flow;

means for selecting data for transmission over an enhanced dedicated channel (E-DCH) based on a priority associated with at least one of the plurality ~~pluarlity~~ of MAC-d flows, wherein data of at least one of the plurality ~~data~~ of ~~a~~ MAC-d flows associated with a highest priority that has data available for transmission is selected;

on a condition that the selected data is new data that was not previously transmitted, means for assigning an available H-ARQ process for supporting transmission of the selected data, and means for transmitting the selected data over the E-DCH using the assigned H-ARQ process;

on a condition that the selected data was previously transmitted, means for ~~retransmitting~~ transmitting the selected data over the E-DCH using the same H-ARQ process that was assigned to previously transmit the selected data;

a transmission counter configured to indicate a transmission count;

means for incrementing the transmission counter in response to transmitting ~~or retransmitting~~ the selected data;

means for determining whether the transmission counter is at least equal to a maximum number of H-ARQ transmissions associated with ~~a~~ one of the plurality of MAC-d flows from which the data for transmission was selected; and

means for discarding the selected data in response to a determination that the transmission counter is at least equal to ~~the~~ a maximum number of transmissions associated with ~~a~~ one of the plurality of MAC-d flows from which the data for transmission was selected.

10. The WTRU of claim 9 further comprising means for releasing the assigned H-ARQ process on a condition that the WTRU receives feedback information, wherein the feedback information indicates that the transmission of the selected data was successful.

11. The WTRU of claim 9 further comprising means for retransmitting the selected data on a condition that the WTRU receives feedback~~, wherein the feedback~~ information ~~indicates~~ indicating that the transmission was unsuccessful.

12. The WTRU of claim 9 further comprising means for retransmitting the selected data on a condition that the WTRU does not receive feedback information regarding the transmission.

13. The WTRU of claim 9 further comprising means for retransmitting the selected data on a condition that the transmission counter is less than a maximum number of H-ARQ transmissions associated with a MAC-d flow from which the data for transmission was selected.

14. The WTRU of claim 9 further comprising means for setting the transmission counter to zero on a condition that the selected data was transmitted ~~the~~ a maximum number of times.

15. The WTRU of claim 9 further comprising means for setting the transmission counter to zero on a condition that the selected data is new data that was not previously transmitted.

16. The WTRU of claim 9 wherein the data is selected by a medium access control for enhanced dedicated channel (MAC-e).