CLAIMS

1. A wireless transmit/receive unit (WTRU) comprising:

means for ~~providing~~ configuring a set of hybrid automatic repeat request (H-ARQ) processes for supporting transmission over an enhanced uplink (EU) channel, wherein each WTRU medium access control for dedicated channel (MAC-d) flow has access to each H-ARQ process in the set of H-ARQ processes;

means for receiving ~~configuration~~ information, wherein for a particular MAC-d flow, the ~~configuration~~ information ~~indicates which H-ARQ processes are associated with a particular dedicated channel medium access control (MAC-d) flow, wherein the association indicates that data from the particular~~ limits the particular MAC-d flow to a limited set of ~~may be transmitted using an associated~~ H-ARQ processes out of the set of H-ARQ processes;

means for determining whether a first H-ARQ process from the limited set of H-ARQ processes is available for transmitting data from the particular MAC-d flow for a transmission time interval (TTI), ~~means for allocating an H-ARQ process for transmission of data from the MAC-d flow, wherein the allocated H-ARQ process is from one of the associated H-ARQ processes~~; and

means for transmitting data from the particular MAC-d flow in the TTI over the EU channel using the ~~allocated~~ first H-ARQ process, on a condition that the first H-ARQ process is available for transmitting data from the particular MAC-d flow for the TTI.

2. The WTRU of claim 1 wherein ~~configuration~~ information is received for each MAC-d flow configured for the WTRU.

3. The WTRU of claim 1 wherein the ~~configuration~~ information is received via radio resource control (RRC) signaling.

4. The WTRU of claim 1 wherein the ~~configuration~~ information is received from a radio network controller (RNC).

~~5. The WTRU of claim 1 wherein the configuration information limits the H-ARQ processes associated with a MAC-d flow.~~

~~6~~5. The WTRU of claim 1 wherein H-ARQ operation is synchronous between the WTRU and a Node-B.

~~7~~6. A method for supporting enhanced uplink (EU) transmissions implemented by a wireless transmit/receive unit (WTRU), the method comprising:

~~providing~~ configuring a set of hybrid automatic repeat request (H-ARQ) processes for supporting transmission over an EU channel, wherein each WTRU medium access control for dedicated channel (MAC-d) flow has access to each H-ARQ process in the set of H-ARQ processes;

receiving ~~configuration~~ information, wherein for a particular MAC-d flow, the ~~configuration~~ information ~~indicates which H-ARQ processes are associated with a particular dedicated channel medium access control (MAC-d) flow, wherein the association indicates that data from the particular~~ limits the particular MAC-d flow to a limited set of ~~may be transmitted using an associated~~ H-ARQ processes out of the set of H-ARQ processes;

determining whether a first H-ARQ process from the limited set of H-ARQ processes is available for transmitting data from the particular MAC-d flow for a transmission time interval (TTI)~~, allocating an H-ARQ process for transmission of data from the MAC-d flow, wherein the allocated H-ARQ process is from one of the associated H-ARQ processes~~; and

transmitting data from the particular MAC-d flow in the TTI over the EU channel using the ~~allocated~~ first H-ARQ process, on a condition that the first H-ARQ process is available for transmitting data from the particular MAC-d flow for the TTI.

~~8~~7. The method of claim ~~7~~6 wherein ~~configuration~~ information is received for each MAC-d flow configured for the WTRU.

~~98~~. The method of claim ~~7~~ 6 wherein the ~~configuration~~ information is received via radio resource control (RRC) signaling.

~~109~~. The method of claim ~~7~~ 6 wherein the ~~configuration~~ information is received from a radio network controller (RNC).

~~11. The method of claim 7 wherein the configuration information limits the H-ARQ processes associated with a MAC-d flow.~~

~~12~~10. The method of claim ~~7~~6 wherein H-ARQ operation is synchronous between the WTRU and a Node-B.

11. The WTRU of claim 1 wherein each MAC-d flow is associated with a priority.

12. The WTRU of claim 1 wherein the particular MAC-d flow is associated with a highest priority.

13. The method of claim 6 wherein each MAC-d flow is associated with a priority.

14. The method of claim 6 wherein the particular MAC-d flow is associated with a highest priority.