CLAIMS

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

means for 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 information, wherein for a particular MAC-d flow, the information limits the particular MAC-d flow to a limited set of H-ARQ processes out of the set of H-ARQ processes, wherein the information is received via radio resource control (RRC) signaling;

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); and

means for transmitting data from the particular MAC-d flow in the TTI over the EU channel using the 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 information is received for each MAC-d flow configured for the WTRU.

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

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

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

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 information, wherein for a particular MAC-d flow, the information limits the particular MAC-d flow to a limited set of H-ARQ processes out of the set of H-ARQ processes, wherein the information is received via radio resource control (RRC) signaling;

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); and

transmitting data from the particular MAC-d flow in the TTI over the EU channel using the 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.

6. The method of claim 5 wherein information is received for each MAC-d flow configured for the WTRU.

7. The method of claim 5 wherein the information is received from a radio network controller (RNC).

8. The method of claim 5 wherein H-ARQ operation is synchronous between the WTRU and a Node-B.

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

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

11. The method of claim 5 wherein each MAC-d flow is associated with a priority.

12. The method of claim 5 wherein the particular MAC-d flow is associated with a highest priority.

CLAIMS

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

means for 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 information, wherein for a particular MAC-d flow, the information limits the particular MAC-d flow to a limited set of 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); and

means for transmitting data from the particular MAC-d flow in the TTI over the EU channel using the 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 information is received for each MAC-d flow configured for the WTRU.

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

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

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

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

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 information, wherein for a particular MAC-d flow, the information limits the particular MAC-d flow to a limited set of 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); and

transmitting data from the particular MAC-d flow in the TTI over the EU channel using the 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.

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

8. The method of claim 6 wherein the information is received via radio resource control (RRC) signaling.

9. The method of claim 6 wherein the information is received from a radio network controller (RNC).

10. The method of claim 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.