information from the Node-B. If the established threshold is set to zero, the WTRU may transfer the stored EU data from the buffer of the WTRU to the Node-B only after receiving scheduling information from the Node-B.

[0011a] According to an aspect, there is provided a method for use by a wireless transmit / receive unit (WTRU) for uplink transmission, the method comprising:

the WTRU transmitting a message to a Node-B, wherein the message is selected from at least a first type, a second type, and a third type;

wherein on a condition that the WTRU does not have capacity for the second type or the third type, the message is the first type indicating that the WTRU has uplink buffered data to transmit;

wherein on a condition that the WTRU has capacity for the second type message, the message is the second type comprising a plurality of indications, wherein each indication indicates an amount of uplink buffered data associated with at least one logical channel;

wherein on a condition that the message is not the first type or the second type, the message is the third type having less information than the second type and more information than the first type;

the WTRU receiving, in response to the message, information that indicates a grant of an uplink data transmission; and

the WTRU transmitting uplink data over an uplink channel based on the received information.

[0011b] According to another aspect, there is provided a wireless transmit / receive unit (WTRU) comprising:

circuitry configured to transmit a message to a Node-B, wherein the message is selected from at least a first type, a second type, and a third type;

wherein on a condition that the WTRU does not have capacity for the second type or the third type, the message is the first type indicating that the WTRU has uplink buffered data to transmit;

wherein on a condition that the WTRU has capacity for the second type message, the message is the second type comprising a plurality of indications, wherein each indication indicates an amount of uplink buffered data associated with at least one logical channel;

wherein on a condition that the message is not the first type or the second type, the message is the third type having less information than the second type and more information than the first type;

circuitry configured to receive, in response to the message, information that indicates a grant of an uplink data transmission; and

circuitry configured to transmit uplink data over an uplink channel based on the received information.

[0012] BRIEF DESCRIPTION OF THE DRAWING(S)

[0013] A more detailed understanding of the invention may be had from the following description of a preferred example, given by way of example and to be understood in conjunction with the accompanying drawing wherein:

[0014] Figure 1 shows a wireless communication system operating in accordance with the present invention;

[0015] Figure 2 is a signal flow diagram for the system of Figure 1 when more than one EU transmission is necessary to transmit all of the EU data buffered in the WTRU;

[0016] Figure 3 is a signal flow diagram for the system of Figure 1 when only one EU transmission is necessary to transmit all of the EU data buffered in the WTRU; and

[0017] Figure 4 is a flowchart of a process including method steps for implementing the reporting of TVMs in accordance with the present invention.

[0018] DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT(S)

[0019] Hereafter, the terminology "WTRU" includes but is not limited to a user equipment (UE), mobile station, fixed or mobile subscriber unit, pager, or any other type of device capable of operating in a wireless environment.

[0020] When referred to hereafter, the terminology "Node-B" includes but is not limited to a base station, site controller, access point or any other type of interfacing device in a wireless environment.

[0021] The present invention may be further applicable to TDD, FDD, and time division synchronous code division multiple access (TD-SCDMA),