

## CLAIMS

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

a processor configured to determine one or more configured physical uplink control channel (PUCCH) resources for a PUCCH, wherein the determination is made based on a number of hybrid automatic repeat request acknowledgement (HARQ-ACK) bits and based on a threshold value;

a processor further configured to determine a format of the PUCCH based on a number of symbols utilized for uplink control information (UCI) and the number of HARQ-ACK bits; and

a transceiver configured to transmit the PUCCH on the one or more PUCCH resources.

2. The WTRU of claim 1 further comprising the transceiver configured to receive a short transmission time interval physical downlink control channel (sPDCCH), wherein a downlink sTTI gap is configured between a sTTI physical downlink control channel (sPDCCH) region and an uplink sTTI for the PUCCH.

3. The WTRU of claim 2, wherein a set of candidate sPDCCH regions includes a plurality of sTTIs.

4. The WTRU of claim 2, wherein a downlink sTTI length is shorter than an uplink sTTI length.

5. The WTRU of claim 1 further comprising a downlink short transmission time interval (sTTI) that partially overlaps with a downlink TTI.

6. The WTRU of claim 1 further comprising:  
the transceiver further configured to transmit, on the PUCCH, first information on an uplink (UL) short transmission time interval (sTTI) concurrently with second information on an UL TTI.

7. The WTRU of claim 6, wherein the UL sTTI is one of plurality of UL sTTIs that overlaps with the UL TTI.

8. A method performed by a wireless transmit/receive unit (WTRU), the method comprising:

determining one or more configured physical uplink control channel (PUCCH) resources for a PUCCH, wherein the determination is made based on a number of hybrid automatic repeat request acknowledgement (HARQ-ACK) bits and based on a threshold value;

determining a format of the PUCCH based on a number of symbols utilized for uplink control information (UCI) and the number of HARQ-ACK bits; and

transmitting the PUCCH on the one or more PUCCH resources.

9. The method of claim 8 further comprising receiving a short transmission time interval physical downlink control channel (sPDCCH), wherein a downlink sTTI gap is configured between a sTTI physical downlink control channel (sPDCCH) region and an uplink sTTI for the PUCCH. .

10. The method of claim 9, wherein a set of candidate sPDCCH regions includes a plurality of sTTIs.

11. The method of claim 9, wherein a downlink sTTI length is shorter than an uplink sTTI length.

12. The method of claim 8 further comprising a downlink short transmission time interval (sTTI) that partially overlaps with a downlink TTI.

13. The method of claim 8 further comprising:

transmitting, on the PUCCH, first information on an uplink (UL) short transmission time interval (sTTI) concurrently with second information on an UL TTI.

14. The method of claim 13, wherein the UL sTTI is one of plurality of UL sTTIs that overlaps with the UL TTI.