CLAIMS

What is Claimed:

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

a processor configured to:

receive first cell suitability criteria for a first cell in one or more system information blocks (SIBs), wherein the first cell suitability criteria comprises a first offset and a threshold, wherein the one or more SIBs indicate that the first cell is not configured for supplementary uplink (SUL) communication;

receive second cell suitability criteria for a second cell in the one or more SIBs, wherein the second cell suitability criteria comprises a second offset, a SUL offset, and a SUL threshold, wherein the one or more SIBs indicate that the second cell is configured for SUL communication and indicate an SUL frequency used for the SUL communication in the second cell, and wherein the SUL offset and SUL threshold are associated with SUL communication of the second cell;

select the second cell based on the second cell being configured for SUL communication, the WTRU supporting SUL communication, the SUL offset, and the SUL threshold; and

camp on the second cell.

2. The WTRU of claim 1, wherein the first offset and the threshold are associated with non-SUL communication by the first cell, and wherein the second offset and the threshold are associated with non-SUL communication by the second cell.

3. The WTRU of claim 1, wherein the threshold is a non-SUL threshold, the first offset is a non-SUL offset associated with the first cell, and the second offset is a non-SUL offset associated with the second cell.

4. The WTRU of claim 1, wherein the processor is further configured to:

measure a reference signal received power (RSRP) associated with the second cell; and

select the second cell based on the RSRP measurement of the second cell, the SUL offset, and the SUL threshold.

5. The WTRU of claim 4, wherein the processor is configured to:

compare the measured RSRP of the second cell to a combination of the SUL offset and the SUL threshold; and

select the second cell based on the measured RSRP of the second cell being greater than the combination of the SUL offset and the SUL threshold.

6. The WTRU of claim 1, wherein the processor is configured to:

determine to use the SUL offset and the SUL threshold instead of the second offset and threshold for the selection of the second cell based on the WTRU supporting SUL communication.

7. The WTRU of claim 1, wherein the WTRU is in an RRC_IDLE state when camped on the second cell.

8. The WTRU of claim 1, wherein the processor is further configured to:

receive a paging message from the second cell when downlink data is available for the WTRU.

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

receiving first cell suitability criteria for a first cell in one or more system information blocks (SIBs), wherein the first cell suitability criteria comprises a first offset and a threshold, wherein the one or more SIBs indicate that the first cell is not configured for supplementary uplink (SUL) communication;

receiving second cell suitability criteria for a second cell in the one or more SIBs, wherein the second cell suitability criteria comprises a second offset, a SUL offset, and a SUL threshold, wherein the one or more SIBs indicate that the second cell is configured for SUL communication and indicate an SUL frequency used for SUL communication in the second cell, and wherein the SUL offset and SUL threshold are associated with SUL communication of the second cell;

selecting the second cell based on the second cell being configured for SUL communication, the WTRU supporting SUL communication, the SUL offset, and the SUL threshold; and

camping on the second cell.

10. The method of claim 9, wherein the first offset and the threshold are associated with non-SUL communication by the first cell, and wherein the second offset and the threshold are

associated with non-SUL communication by the second cell.

11. The method of claim 9, wherein the threshold is a non-SUL threshold, the first offset is a non-SUL offset associated with the first cell, and the second offset is a non-SUL offset associated with the second cell.

12. The method of claim 9, further comprising:

measuring a reference signal received power (RSRP) associated with the second cell; and

selecting the second cell based on the RSRP measurement of the second cell, the SUL offset, and the SUL threshold.

13. The method of claim 12, further comprising:

comparing the measured RSRP of the second cell to a combination of the SUL offset and the SUL threshold; and

selecting the second cell based on the measured RSRP of the second cell being greater than the combination of the SUL offset and the SUL threshold.

14. The method of claim 9, further comprising:

determining to use the SUL offset and the SUL threshold instead of the second offset and threshold for the selection of the second cell based on the WTRU supporting SUL communication.

15. The method of claim 9, wherein the WTRU is in an RRC_IDLE state when camped on the second cell.

16. The method of claim 9, further comprising:

receiving a paging message from the second cell when downlink data is available for the WTRU.