CLAIMS

What is Claimed:

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

a processor configured to:

measure a RX level associated with a cell;

determine whether the measured RX level has a value that indicates a threshold RX level has been met, wherein the value is obtained using a supplementary uplink (SUL) related cell-selection parameter on a condition that the cell is configured to support a SUL and that the WTRU is configured to support the SUL; and

perform a cell selection based on the determination of whether the measured RX level has the value.

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

measuring a RX level associated with a cell;

determining whether the measured RX level has a value that indicates a threshold RX level has been met, wherein the value is obtained using a supplementary uplink (SUL) related cell-selection parameter on a condition that the cell is configured to support a SUL and that the WTRU is configured to support the SUL; and

performing a cell selection based on the determination of whether the measured RX level has the value.

3. The WTRU of claim 1 or the method of claim 2, wherein the SUL related cell-selection parameter is based on a SUL offset specific to the cell.

4. The WTRU of claim 1 or the method of claim 2, wherein the SUL related cell-selection parameter is received in a system information block (SIB).

5. The WTRU of claim 1 or the method of claim 2, wherein the value is obtained using a non-SUL related cell-selection parameter on a condition that the WTRU is not configured to support the SUL or that the cell is not configured to support SUL, wherein the non-SUL related cell-selection parameter is based on a non-SUL offset.

6. The WTRU of claim 1 or the method of claim 2, wherein whether the measured RX level has the value is determined based on a first cell suitability criteria or a second cell suitability criteria, wherein

the first cell suitability criteria are used on a condition that the cell is configured to support the SUL and that the WTRU is configured to support the SUL, and

the second cell suitability criteria are used on a condition that the WTRU is not configured to support the SUL or that the cell is not configured to support SUL.

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

receiving system information from the cell;

determine that the system information includes SUL configuration information; and

determine that the cell is configured to support SUL based on the reception of the system information including the SUL configuration information.

8. The method of claim 2, further comprising:

receiving system information from the cell;

determining that the system information includes SUL configuration information; and

determining that the cell is configured to support SUL based on the reception of the system information including the SUL configuration information.

9. The WTRU of claim 7 or the method of claim 8, wherein the system information comprises the SUL related cell-selection parameter.

10. The WTRU of claim 1 or the method of claim 2, wherein it is determined that the measured RX level does not have the value that indicates the threshold RX level has been met, wherein the cell selection is performed to select a cell that differs from the cell for which the RX level is measured.

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

select the cell based on a determination that the measured RX level has the value that indicates the threshold RX level has been met; and

camp on the cell.

12. The method of claim 2, further comprising:

selecting the cell based on a determination that the measured RX level has the value that indicates the threshold RX level has been met; and

camping on the cell.

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

receive system information from the cell;

determine that the system information does not include SUL configuration information; and

determine that the cell is configured to support SUL based on the system information not including the SUL configuration information.

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

receive, from the cell, a system information block (SIB) comprising information relating to a second cell; and

determine suitability of the second cell based on the SIB, wherein:

if the second cell is configured to support a second SUL and the WTRU is configured to support the second SUL, the processor is configured to determine the suitability of the second cell using a first cell suitability criteria; and

if the second cell is not configured to support the second SUL or the WTRU is not configured to support the second SUL, the processor is configured to determine the suitability of the second cell using a second cell suitability criteria.

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

a processor configured to:

measure a RX level associated with a cell;

determine whether the measured RX level has a value that indicates a threshold RX level has been met, wherein the value is obtained using a supplementary uplink (SUL) related cell-selection parameter on a condition that the WTRU is configured to operate in a SUL associated with the cell; and

perform a cell selection based on the determination whether the measured RX level has the value.