

CLAIMS**WHAT IS CLAIMED IS:**

1. A method of wireless communication at a base station, comprising:
receiving an indication from a network entity that a UE is in one of a discontinuous reception (DRX) mode or an extended DRX (eDRX) mode; and
configuring, by the base station, a wake up signal (WUS) mode for the UE, the WUS mode corresponding to the DRX mode or the eDRX mode for the UE.
2. The method of claim 1, wherein the base station configures the WUS mode to include a WUS for each paging occasion for the UE.
3. The method of claim 2, wherein the indication indicates that the UE is in a DRX mode, the method further comprising:
configuring, at the base station, a DRX cycle for the UE and the WUS having an associated paging occasion per DRX cycle for the UE.
4. The method of claim 3, wherein the UE comprises a narrow band internet of things (NB IoT) UE, the DRX cycle configured by the base station is cell specific, and the UE is configured to receive a WUS for each configured DRX cycle at the associated paging occasion.
5. The method of claim 3, wherein the UE comprises a machine type communication (MTC) UE, the DRX cycle is specific to the MTC UE, and the UE is configured to receive a WUS for each configured DRX cycle at the associated paging occasion.
6. The method of claim 1, wherein the WUS mode includes a single WUS for multiple paging occasions for the UE.
7. The method of claim 6, wherein a number of the multiple paging occasions corresponding to the single WUS is cell specific.

8. The method of claim 7, wherein the number of the multiple paging occasions is determined by the base station.
9. The method of claim 7, wherein the number of the multiple paging occasions is broadcast to the UE in system information.
10. An apparatus for wireless communication at a base station, comprising:
 - means for receiving an indication from a network entity that a UE is in one of a discontinuous reception (DRX) mode or an extended DRX (eDRX) mode; and
 - means for configuring a wake up signal (WUS) mode for the UE, the WUS mode corresponding to the DRX mode or the eDRX mode for the UE.
11. The apparatus of claim 10, further comprising:
 - means for configuring the WUS mode to include a WUS for each paging occasion for the UE.
12. The apparatus of claim 11, further comprising:
 - means for configuring a DRX cycle for the UE and the WUS having an associated paging occasion per DRX cycle for the UE, wherein the indication indicates that the UE is in a DRX mode.
13. The apparatus of claim 12, further comprising means for configuring the DRX cycle to be cell specific for a narrow band internet of things (NB IoT) UE.
14. The apparatus of claim 12, further comprising means for configuring the DRX cycle to be UE specific for a machine type communication (MTC) UE.
15. The apparatus of claim 10, wherein the WUS mode includes a single WUS for multiple paging occasions for the UE.
16. The apparatus of claim 15, further comprising means for determining a number of the multiple paging occasions that is cell specific.

17. The apparatus of claim 15, further comprising means for broadcasting a number of the multiple paging occasions to the UE in system information block.
18. An apparatus for wireless communication at a base station, comprising:
a memory; and
at least one processor coupled to the memory and configured to:
receive an indication from a network entity that a UE is in one of a discontinuous reception (DRX) mode or an extended DRX (eDRX) mode; and
configure a wake up signal (WUS) mode for the UE, the WUS mode corresponding to the DRX mode or the eDRX mode for the UE.
19. The apparatus of claim 18, wherein the at least one processor is further configured to:
configure the WUS mode to include a WUS for each paging occasion for the UE.
20. The apparatus of claim 18, wherein the at least one processor is further configured to:
configure a DRX cycle for the UE and the WUS having an associated paging occasion per DRX cycle for the UE, wherein the indication indicates that the UE is in a DRX mode.
21. The apparatus of claim 18, wherein the at least one processor is further configured to:
configure the WUS mode to include a single WUS for multiple paging occasions for the UE.
22. The apparatus of claim 21, wherein the at least one processor is further configured to:
determine a number of the multiple paging occasions that is cell specific.

23. A computer-readable medium storing computer executable code for wireless communication at a User Equipment (UE), comprising code to:
- receive an indication from a network entity that a UE is in one of a discontinuous reception (DRX) mode or an extended DRX (eDRX) mode; and
 - configure a wake up signal (WUS) mode for the UE, the WUS mode corresponding to the DRX mode or the eDRX mode for the UE.
24. The computer-readable medium of claim 23, further comprising code to:
- configure the WUS mode to include a WUS for each paging occasion for the UE.
25. The computer-readable medium of claim 24, further comprising code to:
- configure a DRX cycle for the UE and the WUS having an associated paging occasion per DRX cycle for the UE, wherein the indication indicates that the UE is in a DRX mode.
26. The computer-readable medium of claim 23, further comprising code to:
- configure the WUS mode to include a single WUS for multiple paging occasions for the UE.
27. The computer-readable medium of claim 26, further comprising code to:
- determine a number of the multiple paging occasions that is cell specific.
28. A method of wireless communication at a User Equipment (UE), comprising:
- receiving a wake up signal (WUS) configuration from a base station for the UE for one of a discontinuous reception (DRX) mode or an extended DRX (eDRX) mode; and
 - listening for a WUS prior to a paging occasion based on the received configuration from the base station.
29. The method of claim 28, wherein the WUS configuration includes a WUS for each paging occasion.

30. The method of claim 29, wherein the UE is in a DRX mode, the method further comprising:

receiving, from the base station, a DRX cycle configuration for the UE and the WUS having an associated paging occasion per DRX cycle for the UE.

31. The method of claim 30, wherein the UE comprises a narrow band internet of things (NB IoT) UE, the DRX cycle configured by the base station is cell specific, and the UE assumes a WUS will be transmitted for each configured DRX cycle at the associated paging occasion.

32. The method of claim 30, wherein the UE comprises a machine type communication (MTC) UE, the DRX cycle is specific to the MTC UE, and the UE assumes a WUS will be transmitted for each configured DRX cycle at the associated paging occasion.

33. The method of claim 28, wherein the WUS configuration comprises a single WUS for multiple paging occasions.

34. The method of claim 33, wherein a number of the multiple paging occasions corresponding to the single WUS is cell specific.

35. The method of claim 34, wherein the number of the multiple paging occasions is determined by the base station.

36. The method of claim 34, further comprising:

receiving an indication of the number of the multiple paging occasions in a broadcast of system information.

37. An apparatus for wireless communication at a User Equipment (UE), comprising:
means for receiving a wake up signal (WUS) configuration from a base station for the UE for one of a discontinuous reception (DRX) mode or an extended DRX (eDRX) mode; and

means for listening for a WUS prior to a paging occasion based on the received configuration from the base station.

38. The apparatus of claim 37, further comprising:
means for receiving a DRX cycle configuration for the UE and the WUS having an associated paging occasion per DRX cycle for the UE, wherein the UE is in a DRX mode.
39. The apparatus of claim 37, further comprising:
means for receiving the WUS configuration comprising a single WUS for multiple paging occasions.
40. The apparatus of claim 39, further comprising:
means for receiving an indication of a number of the multiple paging occasions in a broadcast of system information.
41. An apparatus for wireless communication at a user equipment (UE), comprising:
a memory; and
at least one processor coupled to the memory and configured to:
receive a wake up signal (WUS) configuration from a base station for the UE for one of a discontinuous reception (DRX) mode or an extended DRX (eDRX) mode; and
listen for a WUS prior to a paging occasion based on the received configuration from the base station.
42. The apparatus of claim 41, wherein the at least one processor is further configured to:
receive a DRX cycle configuration for the UE and the WUS having an associated paging occasion per DRX cycle for the UE, wherein the UE is in a DRX mode.
43. The apparatus of claim 41, wherein the at least one processor is further configured to:
receive the WUS configuration comprising a single WUS for multiple paging occasions.

44. The apparatus of claim 43, wherein the at least one processor is further configured to:
- receive an indication of a number of the multiple paging occasions in a broadcast of system information.
45. A computer-readable medium storing computer executable code for wireless communication at a User Equipment (UE), comprising code to:
- receive a wake up signal (WUS) configuration from a base station for the UE for one of a discontinuous reception (DRX) mode or an extended DRX (eDRX) mode; and
 - listen for a WUS prior to a paging occasion based on the received configuration from the base station.
46. The computer-readable medium of claim 45, further comprising code to:
- receive a DRX cycle configuration for the UE and the WUS having an associated paging occasion per DRX cycle for the UE, wherein the UE is in a DRX mode.
47. The computer-readable medium of claim 45, further comprising code to:
- receive the WUS configuration comprising a single WUS for multiple paging occasions.
48. The computer-readable medium of claim 47, further comprising code to:
- receive an indication of a number of the multiple paging occasions in a broadcast of system information.
49. A method of wireless communication at a User Equipment (UE), comprising:
- entering a relaxed Radio Resource Management (RRM) measurement with a first cell, wherein the relaxed RRM measurement comprises a single RRM measurement for more than one DRX cycle;
 - reselecting to a second cell that supports the relaxed RRM measurement; and
 - returning to a regular RRM measurement for a time period, wherein the regular RRM measurement comprises one RRM measurement for each DRX cycle.

50. The method of claim 49, wherein the time period is based on an indication received from a base station via a broadcast system information.
51. The method of claim 49, wherein the time period is calculated based on configuration parameters for the relaxed RRM measurement received from a base station via a broadcast system information.
52. The method of claim 49, wherein the time period is based at least in part on a predefined minimum duration.
53. The method of claim 52, wherein the predefined minimum duration comprises a time length for the UE to perform an RRM measurement to meet an accuracy requirement.
54. The method of claim 52, wherein the predefined minimum duration comprises a time length corresponding to the UE being identified as a low mobility UE.
55. An apparatus for wireless communication at a User Equipment (UE), comprising:
means for entering a relaxed Radio Resource Management (RRM) measurement with a first cell, wherein the relaxed RRM measurement comprises a single RRM measurement for more than one DRX cycle;
means for reselecting to a second cell that supports the relaxed RRM measurement; and
means for returning to a regular RRM measurement for a time period, wherein the regular RRM measurement comprises one RRM measurement for each DRX cycle.
56. The apparatus of claim 55, further comprising:
means for receiving an indication of the time period from a base station via a broadcast system information.
57. An apparatus for wireless communication at a user equipment (UE), comprising:
a memory; and
at least one processor coupled to the memory and configured to:

enter a relaxed Radio Resource Management (RRM) measurement with a first cell, wherein the relaxed RRM measurement comprises a single RRM measurement for more than one DRX cycle;
reselect to a second cell that supports the relaxed RRM measurement;
and
return to a regular RRM measurement for a time period, wherein the regular RRM measurement comprises one RRM measurement for each DRX cycle.

58. The apparatus of claim 57, wherein the at least one processor is further configured to:

receive an indication of the time period from a base station via a broadcast system information.

59. A computer-readable medium storing computer executable code for wireless communication at a User Equipment (UE), comprising code to:

enter a relaxed Radio Resource Management (RRM) measurement with a first cell, wherein the relaxed RRM measurement comprises a single RRM measurement for more than one DRX cycle;
reselect to a second cell that supports the relaxed RRM measurement; and
return to a regular RRM measurement for a time period, wherein the regular RRM measurement comprises one RRM measurement for each DRX cycle.

60. The computer-readable medium of claim 59, further comprising code to:

receive an indication of the time period from a base station via a broadcast system information.

61. A method of wireless communication at a User Equipment (UE), comprising:

entering a discontinuous reception (DRX) mode or an extended discontinuous reception (eDRX) mode, the DRX mode or the eDRX mode comprising a wake up signal (WUS) mode with a first cell;
reselecting to a second cell that supports the WUS mode; and
returning to the DRX mode or the eDRX mode without the WUS mode for a time period after the reselecting to the second cell.

62. The method of claim 61, wherein the time period is based on an indication received from a base station via a broadcast system information.
63. The method of claim 61, wherein the time period is based on a predefined minimum duration.
64. The method of claim 63, wherein the time period is determined based on parameters of a WUS configuration received from a network entity for the UE.
65. The method of claim 64, wherein the time period is based on a Mobility Management Entity (MME) latency requirement and a duration of a previous WUS detection.
66. The method of claim 61, wherein the time period is determined based on parameters of a WUS configuration received from a base station for the UE.
67. The method of claim 61, wherein the time period is determined based on a predefined lookup table based on a WUS configuration.
68. The method of claim 64, wherein the time period is based on a number of DRX cycles after the UE reselects to the second cell.
69. The method of claim 68, wherein the WUS mode comprises a WUS for each DRX cycle, and the time period comprises at least two DRX cycles, and wherein after the at least two DRX cycles, the UE returns to the WUS mode.
70. The method of claim 68, wherein the WUS mode comprises a single WUS for N multiple DRX cycles, and the time period corresponds to N DRX cycles.
71. The method of claim 68, wherein the WUS mode comprises a single WUS for N multiple DRX cycles, and the eDRX mode comprises a relaxed Radio Resource Management (RRM) measurement having a single RRM measurement for every M DRX cycles, and

wherein the time period comprises $N-M_0$ DRX cycles, where M_0 refers to the RRM measurement at which the UE reselects to the second cell.

72. An apparatus for wireless communication at a User Equipment (UE), comprising:
means for entering a discontinuous reception (DRX) mode or an extended discontinuous reception (eDRX) mode, the DRX mode or the eDRX mode comprising a wake up signal (WUS) mode with a first cell;

means for reselecting to a second cell that supports the WUS mode; and

means for returning to the DRX mode or the eDRX mode without the WUS mode for a time period after the reselecting to the second cell.

73. The apparatus of claim 72, further comprising:

means for receiving an indication of the time period from a base station via a broadcast system information, wherein the time period is based on a predefined minimum duration.

74. The apparatus of claim 72, further comprising:

means for receiving an indication of the time period based on parameters of a WUS configuration received from a base station.

75. The apparatus of claim 72, further comprising:

means for receiving an indication of the time period based on a predefined lookup table based on a WUS configuration.

76. An apparatus for wireless communication at a user equipment (UE), comprising:
a memory; and

at least one processor coupled to the memory and configured to:

enter a discontinuous reception (DRX) mode or an extended discontinuous reception (eDRX) mode, the DRX mode or the eDRX mode comprising a wake up signal (WUS) mode with a first cell;

reselect to a second cell that supports the WUS mode; and

return to the DRX mode or the eDRX mode without the WUS mode for a time period after the reselecting to the second cell.

77. The apparatus of claim 76, wherein the at least one processor is further configured to:

receive an indication of the time period from a base station via a broadcast system information, wherein the time period is based on a predefined minimum duration.

78. The apparatus of claim 76, wherein the at least one processor is further configured to:

receive an indication of the time period based on parameters of a WUS configuration received from a base station.

79. The apparatus of claim 76, wherein the at least one processor is further configured to:

receive an indication of the time period based on a predefined lookup table based on a WUS configuration.

80. A computer-readable medium storing computer executable code for wireless communication at a User Equipment (UE), comprising code to:

enter a discontinuous reception (DRX) mode or an extended discontinuous reception (eDRX) mode, the DRX mode or the eDRX mode comprising a wake up signal (WUS) mode with a first cell;

reselect to a second cell that supports the WUS mode; and

return to the DRX mode or the eDRX mode without the WUS mode for a time period after the reselecting to the second cell.

81. The computer-readable medium of claim 80, further comprising code to:

receive an indication of the time period from a base station via a broadcast system information, wherein the time period is based on a predefined minimum duration.

82. The computer-readable medium of claim 80, further comprising code to:

receive an indication of the time period based on parameters of a WUS configuration received from a base station.

83. The computer-readable medium of claim 80, further comprising code to:
receive an indication of the time period based on a predefined lookup table
based on a WUS configuration.