

CLAIMS

1. A user equipment, comprising:
a processor; and
a transceiver coupled to the processor,
wherein the processor is configured to:
 - receive, via the transceiver, a measurement configuration; and
 - perform, via the transceiver, a first measurement for a serving cell or a neighboring cell based on the measurement configuration.
2. The user equipment of claim 1, wherein performing the first measurement for the serving cell or the neighboring cell comprises:
 - performing the first measurement for the serving cell or the neighboring cell based on a first criterion comprised in the measurement configuration.
3. The user equipment of claim 2, wherein performing the first measurement for the serving cell or the neighboring cell based on the first criterion comprises:
 - determining a power level value for the serving cell; and
 - determining a difference between the power level value and a reference power level value, and wherein:
 - in the case that the difference is smaller than a first threshold for a first time duration, performing a first measurement for the neighboring cell; or
 - in the case at least one of (i) the difference is smaller than a sum of the first threshold and a second threshold for a first time duration, or (ii) the difference is smaller than the first threshold for a sum of the first time duration and a second time duration, performing a first measurement for the serving cell, and optionally, wherein the second threshold is configured as a scaling factor of the first threshold in the measurement configuration, and the second time duration is configured as a scaling factor of the first time duration in the measurement configuration.
4. The user equipment of claim 1, wherein performing the first measurement for the serving cell or the neighboring cell comprises:

performing the first measurement for neighboring cells during a first gap in a low power radio module of the user equipment, wherein the first gap is configured as a scaling factor of a second gap configured for measurement in a main radio module of the user equipment, or

wherein the measurement configuration comprises neighboring cell information, and the neighboring cell information comprises one of the following:

a cell ID,

a low power synchronization period and a time offset to the serving cell,

an association low power synchronization ID.

5. The user equipment of claim 1, wherein performing the first measurement for the serving cell or the neighboring cell comprises:

performing the first measurement in a low power radio module of the user equipment based on a second criterion.

6. The user equipment of claim 1, wherein performing the first measurement for the serving cell or the neighboring cell comprises:

performing the first measurement in a main radio module of the user equipment based on a second criterion.

7. The user equipment of claim 1, wherein performing the first measurement for the serving cell or the neighboring cell comprises:

performing the first measurement in a low power radio module of the user equipment based on a low power synchronization signal.

8. The user equipment of claim 1, wherein performing the first measurement for the serving cell or the neighboring cell comprises:

performing the first measurement in a low power radio module of the user equipment based on a low power wake-up signal.

9. The user equipment of claim 7, wherein the first measurement is defined as linear average over power contributions of resource elements that carry the low power synchronization signal.

10. The user equipment of claim 7, wherein the first measurement is defined as linear average over power contributions of resource elements that carry an ON key part of the low power synchronization signal.

11. A base station, comprising:

a processor; and

a transceiver coupled to the processor,

wherein the processor is configured to:

transmit, via the transceiver and to a user equipment, a measurement configuration for performing a first measurement for a serving cell or a neighboring cell, wherein the measurement configuration comprises neighboring cell information, and wherein the neighboring cell information comprises one of the following:

a cell ID,

low power synchronization period and time offset to that of the serving cell,

association low power synchronization ID.

12. A processor for wireless communication, comprising:

at least one memory; and

a controller coupled with the at least one memory and configured to cause the controller to:

receive, from a base station, a measurement configuration; and

perform a first measurement for a serving cell or a neighboring cell based on the measurement configuration.

13. A processor for wireless communication, comprising:

at least one memory; and

a controller coupled with the at least one memory and configured to cause the controller to:

transmit, to a user equipment, a measurement configuration for performing a first measurement for a serving cell or a neighboring cell, wherein the measurement configuration comprises neighboring cell information, and

wherein the neighboring cell information comprises one of the following:

- a cell ID,
- low power synchronization period and time offset to that of the serving cell,
- association low power synchronization ID.

14. A method performed by a user equipment, the method comprising:
receiving, from a base station, a measurement configuration; and
performing a first measurement for a serving cell or a neighboring cell based on the measurement configuration.

15. A method performed by a base station, the method comprising:
transmitting, to a user equipment, a measurement configuration for performing a first measurement for a serving cell or a neighboring cell, wherein the measurement configuration comprises neighboring cell information, and wherein the neighboring cell information comprises one of the following:

- a cell ID,
- low power synchronization period and time offset to that of the serving cell,
- association low power synchronization ID.