

WHAT IS CLAIMED IS:

1. A method for determining a radio resource management (RRM) measurement configuration, performed by a user equipment (UE), the method comprising:

in response to an extended discontinuous reception (eDRX) cycle of the UE having a paging time window (PTW), determining a relaxed RRM measurement configuration according to a situation where an RRM measurement relaxation is limited to the PTW;

wherein the RRM measurement configuration comprises RRM measurement configuration for a neighbor cell, wherein the RRM measurement configuration for the neighbor cell comprises at least one of a detection cycle, a measurement cycle or an evaluation cycle;

wherein determining the relaxed RRM measurement configuration according to the situation where the RRM measurement relaxation is limited to the PTW comprises at least one of:

in response to the RRM measurement relaxation not being limited to the PTW, determining at least one of a relaxed detection cycle, a relaxed measurement cycle or a relaxed evaluation cycle for a neighbor cell according to a relaxation coefficient, wherein a number of DRX cycles comprised in the relaxed detection cycle, the relaxed measurement cycle and the relaxed evaluation cycle is allowed to be greater than a number of DRX cycles comprised in one PTW; or

in response to the RRM measurement relaxation being limited to the PTW, determining at least one of a relaxed measurement cycle or a relaxed evaluation cycle for a neighbor cell according to a relaxation coefficient and a length of the PTW, wherein a number of DRX cycles comprised in the relaxed measurement cycle and the relaxed evaluation cycle is not greater than a number of DRX cycles comprised in one PTW.

2. The method according to claim 1, wherein the RRM measurement configuration comprises at least one of:

RRM measurement configuration for a serving cell, wherein the RRM measurement configuration for the serving cell comprises at least a measurement cycle, and the measurement cycle is configured for measurement of the serving cell;

wherein the detection cycle is configured to identify and evaluate the neighbor cell;

the measurement cycle is configured to measure the neighbor cell; and

the evaluation cycle is configured to evaluate the neighbor cell according to a measurement result measured in the measurement cycle.

3. The method according to claim 2, wherein determining the relaxed RRM measurement configuration according to the situation where the RRM measurement relaxation is limited to the PTW comprises:

enlarging with the relaxation coefficient, any cycle comprised in the RRM measurement configuration before relaxation according to the situation where the RRM measurement relaxation is limited to the PTW, to obtain a relaxed cycle, wherein the relaxation coefficient is any positive integer greater than 1.

4. The method according to any one of claims 1 to 3, wherein determining the relaxed RRM measurement configuration according to the situation where the RRM measurement relaxation is limited to the PTW comprises at least one of:

in response to the RRM measurement relaxation not being limited to the PTW, determining a relaxed measurement cycle for a serving cell according to the relaxation coefficient, wherein a number of DRX cycles comprised in the relaxed measurement cycle for the serving cell is allowed to be greater than a number of DRX cycles comprised in one PTW;

in response to the RRM measurement relaxation being limited to the PTW, determining a relaxed measurement cycle for a serving cell according to the relaxation coefficient and the length of the PTW, wherein a number of DRX cycles comprised in the relaxed measurement cycle for the serving cell is not greater than a number of DRX cycles comprised in one PTW;
or

in response to the RRM measurement relaxation being limited to the PTW, determining the relaxed detection cycle for the neighbor cell according to the relaxation coefficient.

5. The method according to claim 1, wherein in response to the RRM measurement relaxation not being limited to the PTW, determining at least one of the relaxed detection cycle, the relaxed measurement cycle or the relaxed evaluation cycle for the neighbor cell according to the relaxation coefficient comprises:

in response to the RRM measurement relaxation not being limited to the PTW, determining the relaxed detection cycle for the neighbor cell according to a relaxation coefficient of a detection cycle for the neighbor cell;

in response to the RRM measurement relaxation not being limited to the PTW, determining the relaxed measurement cycle for the neighbor cell according to a relaxation coefficient of a measurement cycle for the neighbor cell; or

in response to the RRM measurement relaxation not being limited to the PTW, determining the relaxed evaluation cycle for the neighbor cell according to a relaxation

coefficient of an evaluation cycle for the neighbor cell;

wherein for the neighbor cell, any two among the relaxation coefficient of the detection cycle, the relaxation coefficient of the measurement cycle, and the relaxation coefficient of the evaluation cycle are independent of each other.

6. The method according to any one of claims 1 to 5, further comprising:

determining whether the RRM measurement is allowed to be relaxed when the UE has the eDRX cycle;

wherein in response to the eDRX cycle of the UE having the PTW, determining the relaxed RRM measurement configuration according to the situation where the RRM measurement relaxation is limited to the PTW comprises:

in response to determining that the RRM measurement is allowed to be relaxed when the UE has the eDRX cycle and the eDRX cycle of the UE has the PTW, determining the relaxed RRM measurement configuration according to the situation where the RRM measurement relaxation is limited to the PTW.

7. The method according to claim 6, wherein determining whether the RRM measurement is allowed to be relaxed when the UE has the eDRX cycle comprises at least one of:

determining, according to an agreement, whether the RRM measurement is allowed to be relaxed when the UE has the eDRX cycle; or

determining, according to a received configuration signaling, whether the RRM measurement is allowed to be relaxed when the UE has the eDRX cycle.

8. A communication device, comprising: a processor, a transceiver, and a memory storing executable programs that are able to be run by the processor, wherein when the executable programs are run by the processor, the method for determining a radio resource management (RRM) measurement configuration according to any one of claims 1 to 7 is implemented.

9. A computer-readable storage medium storing executable programs, wherein when the executable programs are executed by a processor, the method for determining a radio resource management (RRM) measurement configuration according to any one of claims 1 to 7 is implemented.