CLAIMS

1. A method for determining a paging cycle, comprising:

for a terminal device in a radio resource control inactive (RRC_INACTIVE) state, in response to that the terminal device does not use at least one of a paging time window (PTW) or a paging hyperframe (PH) for monitoring paging under a configuration of a first cycle parameter, determining, by the terminal device, a cycle of monitoring paging according to the first cycle parameter;

wherein the first cycle parameter comprises at least one of a core network (CN) extended discontinuous reception (eDRX) cycle, a radio access network (RAN) eDRX cycle, a CN discontinuous reception (DRX) cycle, an RAN DRX cycle or a cell default paging cycle (defaultPagingCycle) indicated by a system message.

2. The method of claim 1, wherein determining, by the terminal device, the cycle of monitoring paging according to the first cycle parameter comprises:

in a case that the terminal device supports configuration of the CN eDRX cycle and does not support configuration of the RAN eDRX cycle, determining, by the terminal device, that the cycle of monitoring paging is the shortest one of the CN eDRX cycle and an RAN paging cycle (ran-PagingCycle), or is the shortest one of the CN eDRX cycle, the ran-PagingCycle and the defaultPagingCycle.

3. The method of claim 2, wherein in a case that the defaultPagingCycle is not considered, determining, by the terminal device, the cycle of monitoring paging according to the first cycle parameter comprises:

in response to that an RAN configures the ran-PagingCycle, determining, by the terminal device, that the cycle of the monitoring paging is the shortest one of the CN eDRX cycle and the ran-PagingCycle;

in response to that the RAN does not configure the ran-PagingCycle, determining, by the terminal device, that the cycle of the monitoring paging is the CN eDRX cycle.

4. The method of claim 1, wherein determining, by the terminal device, the cycle of monitoring paging according to the first cycle parameter, comprises:

in a case that the terminal device supports configuration of CN eDRX cycle by a CN and configuration of RAN eDRX cycle by an RAN, determining, by the terminal device, that the cycle of the monitoring paging is at least one of the CN eDRX cycle, the RAN eDRX cycle, the CN DRX cycle, the RAN DRX cycle, and the defaultPagingCycle.

5. The method of claim 4, wherein determining, by the terminal device, the cycle of monitoring paging according to the first cycle parameter, comprises

in response to that the CN configures the CN eDRX cycle and the RAN configures the RAN eDRX cycle, determining, by the terminal device, that the cycle of the monitoring paging is the shortest one of the CN eDRX cycle and the RAN eDRX cycle.

6. The method of claim 4, wherein in a case that the CN configures the CN eDRX cycle, the RAN does not configure the RAN eDRX cycle, and the defaultPagingCycle is not considered, determining, by the terminal device, the cycle of monitoring paging according to the first cycle parameter comprises:

in response to that the RAN configures an ran-PagingCycle, determining, by the terminal device, that the cycle of the monitoring paging is the shortest one of the CN eDRX cycle and the ran-PagingCycle;

in response to that the RAN does not configure the ran-PagingCycle, determining, by the terminal device, that the cycle of the monitoring paging is the CN eDRX cycle.

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

receiving, by the terminal device, the first cycle parameter configured by a network device.

8. The method of any one of claims 1 to 7, further comprising:

calculating, by the terminal device, a corresponding sub-frame paging occasion (PO) according to the DRX cycle of the monitoring paging and an identity of the terminal device.

9. A terminal device, comprising:

a processing module, configured to: for a terminal device in a radio resource control inactive (RRC_INACTIVE) state, in response to that the terminal device does not use at least one of a paging time window (PTW) or a paging hyperframe (PH) for monitoring paging under

a configuration of a first cycle parameter, determine a cycle of monitoring paging according to the first cycle parameter;

wherein the first cycle parameter comprises at least one of a core network (CN) extended discontinuous reception (eDRX) cycle, a radio access network (RAN) eDRX cycle, a CN discontinuous reception (DRX) cycle, an RAN DRX cycle or a cell default paging cycle (defaultPagingCycle) indicated by a system message.

10. The terminal device of claim 9, wherein

the processing module is specifically configured to: in a case that the terminal device supports configuration of the CN eDRX cycle and does not support configuration of the RAN eDRX cycle, determine that the cycle of monitoring paging is the shortest one of the CN eDRX cycle and an RAN paging cycle (ran-PagingCycle), or is the shortest one of the CN eDRX cycle, the ran-PagingCycle and the defaultPagingCycle.

11. The terminal device of claim 10, wherein in a case that the defaultPagingCycle is not considered, the processing module is specifically configured to:

in response to that an RAN configures the ran-PagingCycle, determine that the cycle of the monitoring paging is the shortest one of the CN eDRX cycle and the ran-PagingCycle;

in response to that the RAN does not configure the ran-PagingCycle, determine that the cycle of the monitoring paging is the CN eDRX cycle.

12. A terminal device, comprising:

a processor, configured to: for a terminal device in a radio resource control inactive (RRC_INACTIVE) state, in response to that the terminal device does not use at least one of a paging time window (PTW) or a paging hyperframe (PH) for monitoring paging under a configuration of a first cycle parameter, determine a cycle of monitoring paging according to the first cycle parameter;

wherein the first cycle parameter comprises at least one of a core network (CN) extended discontinuous reception (eDRX) cycle, a radio access network (RAN) eDRX cycle, a CN discontinuous reception (DRX) cycle, an RAN DRX cycle or a cell default paging cycle (defaultPagingCycle) indicated by a system message.

13. The terminal device of claim 12, wherein

the processor is specifically configured to: in response to that the terminal device supports configuration of the CN eDRX cycle and does not support configuration of the RAN eDRX cycle, determine that the cycle of monitoring paging is a smaller one in the CN eDRX cycle and an RAN paging cycle (ran-PagingCycle), or is the shortest one of the CN eDRX cycle, the ran-PagingCycle and the defaultPagingCycle.

14. The terminal device of claim 13, wherein in a case that the defaultPagingCycle is not considered, the processor is configured to:

in response to that an RAN configures the ran-PagingCycle, determine that the cycle of the monitoring paging is the shortest one of the CN eDRX cycle and the ran-PagingCycle;

in response to that the RAN does not configure the ran-PagingCycle, determine that the cycle of the monitoring paging is the CN eDRX cycle.

15. The terminal device of claim 12, wherein

the processor is specifically configured to: in response to that the terminal device supports configuration of CN eDRX cycle by a CN and configuration of RAN eDRX cycle by an RAN, determine that the cycle of the monitoring paging is at least one of the CN eDRX cycle, the RAN eDRX cycle, the CN DRX cycle, the RAN DRX cycle, and the defaultPagingCycle.

16. The terminal device of claim 15, wherein

the processor is specifically configured to: in response to that the CN configures the CN eDRX cycle and the RAN configures the RAN eDRX cycle, determine that the cycle of the monitoring paging is the shortest one of the CN eDRX cycle and the RAN eDRX cycle.

17. The terminal device of claim 15, wherein in a case that the CN configures the CN eDRX cycle, the RAN does not configure the RAN eDRX cycle, and the defaultPagingCycle is not considered, the processor is specifically configured to:

in response to that the RAN configures a ran-PagingCycle, determine that the cycle of the monitoring paging is the shortest one of the CN eDRX cycle and the ran-PagingCycle;

in response to that the RAN does not configure the ran-PagingCycle, determine that the cycle of the monitoring paging is the CN eDRX cycle.

18. The terminal device of any one of claims 12 to 17, further comprising:

a transceiver, configured to receive the first cycle parameter configured by a network device.

19. The terminal device of any one of claims 12 to 18, wherein

the processor is further configured to calculate a corresponding sub-frame paging occasion (PO) according to the DRX cycle of the monitoring paging and an identity of the terminal device.

20. A network device, comprising:

a processor, configured to configure a first cycle parameter to a terminal device in a radio resource control inactive (RRC_INACTIVE) state,

wherein the first cycle parameter comprises at least one of a core network (CN) extended discontinuous reception (eDRX) cycle, a radio access network (RAN) eDRX cycle, a CN discontinuous reception (DRX) cycle, an RAN DRX cycle or a cell default paging cycle (defaultPagingCycle) indicated by a system message.