

WHAT IS CLAIMED IS:

1. A communication method, comprising:

determining, by a terminal device, a type of a discontinuous transmission (DRX) indication signal according to DRX configuration information, wherein the DRX indication signal is configured to indicate that the terminal device wakes up during an on duration of a DRX cycle;

according to the type of the DRX indication signal, detecting by the terminal device the DRX indication signal sent from a network device; and

in response to the DRX indication signal, enabling the terminal device to wake up in the on duration of the DRX cycle.

2. The method according to claim 1, wherein at least one of a sequence type, a sequence number, and a sequence length for different types of DRX indication signals is different;

wherein different types of DRX indication signals provide different synchronization capabilities.

3. The method according to claim 1 or 2, wherein:

the determined type of the DRX indication signal is a first type or a second type;

a DRX indication signal of the first type provides a synchronization capability; and

a DRX indication signal of the second type does not provide the synchronization capability.

4. The method according to claim 3, wherein if the determined type of the DRX indication signal is the first type, the method further comprises:

during detection of the DRX indication signal, performing a synchronization procedure by the terminal device based on the detected DRX indication signal.

5. The method according to any one of claims 1 to 4, wherein detecting by the terminal device the DRX indication signal sent from a network device according to the type of the

DRX indication signal, comprises:

according to a sequence length and/or a sequence number corresponding to the type of the DRX indication signal, detecting by the terminal device the DRX indication signal sent from the network device.

6. The method according to any one of claims 1 to 5, wherein the DRX configuration information comprises a length of the DRX cycle.

7. The method according to claim 6, wherein determining, by a terminal device, a type of a DRX indication signal according to DRX configuration information, comprises:

if the length of the DRX cycle is greater than a first duration, determining that the type of the DRX indication signal is a first type that provides a synchronization capability; or

if the length of the DRX cycle is smaller than or equal to the first duration, determining that the type of the DRX indication signal is a second type that does not provide the synchronization capability.

8. The method according to claim 6, wherein determining, by a terminal device, a type of a DRX indication signal according to DRX configuration information, comprises:

if the length of the DRX cycle is greater than a second duration notified by the network device, determining that the type of the DRX indication signal is a first type that provides a synchronization capability; or

if the length of the DRX cycle is smaller than or equal to a second duration notified by the network device, determining that the type of the DRX indication signal is a second type that does not provide the synchronization capability;

wherein the second duration is determined by the network device based on capability information of the terminal device.

9. The method according to any one of claims 1 to 5, wherein determining, by a terminal device, a type of a DRX indication signal according to DRX configuration information, comprises:

determining, by the terminal device, the type of the DRX indication signal according to the DRX configuration information and capability information of the terminal device.

10. The method according to claim 9, wherein the capability information of the terminal device comprises a duration in which the terminal maintains time-frequency synchronization; and/or,

the DRX configuration information comprises a length of the DRX cycle;

wherein determining, by the terminal device, the type of the DRX indication signal according to the DRX configuration information and capability information of the terminal device, comprises:

determining a second duration according to the duration in which the terminal maintains time-frequency synchronization;

if the length of the DRX cycle is greater than the second duration, determining that the type of the DRX indication signal is a first type that provides a synchronization capability; or

if the length of the DRX cycle is smaller than or equal to the second duration, determining that the type of the DRX indication signal is a second type that does not provide the synchronization capability.

11. The method according to claim 10, wherein determining, by the terminal device, the type of the DRX indication signal according to the DRX configuration information and capability information of the terminal device, comprises:

if the length of the DRX cycle is greater than the duration in which the terminal maintains time-frequency synchronization, determining that the type of the DRX indication signal is a first type that provides a synchronization capability; or

if the length of the DRX cycle is smaller than or equal to the duration in which the terminal maintains time-frequency synchronization, determining that the type of the DRX indication signal is a second type that does not provide the capability.

12. The method according to any one of claims 8 to 11, further comprising:

sending, by the terminal device, indication information to the network device, wherein

the indication information is configured to indicate capability information of the terminal device.

13. The method according to any one of claims 1 to 12, wherein detecting by the terminal device the DRX indication signal sent from a network device, comprises:

detecting, by the terminal device, the DRX indication signal sent from the network device before the on duration or in a first subframe or a first time slot within the on duration.

14. A terminal device, comprising:

a processing unit configured to determine a type of a discontinuous transmission (DRX) indication signal according to DRX configuration information, wherein the DRX indication signal is configured to indicate that the terminal device wakes up during an on duration of a DRX cycle;

a communication unit configured to, according to the type of the DRX indication signal, detect the DRX indication signal sent from a network device;

wherein the processing unit is further configured to, in response to the DRX indication signal, enable the terminal device to wake up in the on duration of the DRX cycle.

15. The terminal device according to claim 14, wherein at least one of a sequence type, a sequence number, and a sequence length for different types of DRX indication signals is different;

wherein different types of DRX indication signals provide different synchronization capabilities.