

CLAIMS

1. A method for optimizing configuration, executed by a network-side device, comprising:

configuring a terminal to report related information of Conditional Handover (CHO) or Conditional Pscell Addition or Change (CPAC),

wherein the related information of the CHO or CPAC comprises one or more of:

before or when performing the CHO or CPAC or when the CHO or CPAC is successful, Radio Link Management (RLM) of the terminal finding that there is an out-of-sync risk in a physical layer of a serving cell, or there is a failure risk in a radio link, or a first timer has been enabled;

an event triggering situation for configured CHO or CPAC;

performing cell selection after Radio Link Failure (RLF) or CHO failure occurs to the terminal, and selecting a CHO candidate cell;

an event triggering situation for the configured CPAC when the RLF occurs to the terminal in a Master Cell Group (MCG);

a Radio Resource Management (RRM) measurement value of at least a serving cell or a neighboring cell measured by the terminal when the first timer is enabled;

a time difference between enabling the first timer and receiving CHO or CPAC configuration;

at least a running situation of the first timer or a number of Radio Link Control (RLC) retransmissions when performing the CHO or CPAC or when the CHO or CPAC is successful;

at least one of an identifier (ID) of a CHO or CPAC candidate cell configured by the network side, an event associated with the CHO or CPAC candidate cell, or a threshold or offset of the event;

random access (RA) information configured for the terminal by a cell where CHO or CPAC failure occurs;

a time difference between configuring the CHO or CPAC and successfully completing RA or Radio Resource Control (RRC) connection by the terminal in a target cell;

time information corresponding to the related information of the CHO or CPAC;

position information of the terminal corresponding to the related information of the CHO or CPAC; and

a measurement result of a wireless network corresponding to the related information of the CHO or CPAC.

2. The method of claim 1, wherein the event triggering situation for the configured CHO or CPAC comprise one of:

- the configured CHO or CPAC being not triggered;
- only one event being triggered for the configured CHO or CPAC;
- one or multiple triggered events for the configured CHO or CPAC; or
- whether one or multiple events for the configured CHO or CPAC are triggered.

3. The method of claim 1, wherein the event triggering situation for the configured CPAC when the RLF occurs to the terminal in the MCG comprise one of:

- the configured CPAC being not triggered;
- only one event being triggered for the configured CPAC;
- one or multiple triggered events for the configured CPAC; or
- whether one or multiple events for the configured CPAC are triggered.

4. The method of claim 1, further comprising:

- receiving the related information of the CHO or CPAC reported by the terminal; and
- performing at least CHO configuration optimization or RA configuration optimization according to the related information of the CHO or CPAC.

5. The method of claim 4, wherein receiving the related information of the CHO or CPAC reported by the terminal comprises:

- receiving an RRC reestablishment request message or a RLF report sent by the terminal in a connected state or in a process of changing to the connected state, the RRC reestablishment request message or the RLF report comprising the related information of the CHO or CPAC;

or,

- receiving a message A sent by the terminal in a process of performing two-step RA to the target cell, the message A comprising the related information of the CHO or CPAC.

6. The method of claim 4, wherein receiving the related information of the CHO or CPAC reported by the terminal comprises:

- sending a first request to the terminal;
- receiving the related information of the CHO or CPAC reported by the terminal

according to the first request;

or,

receiving the related information of the CHO or CPAC initiated by the terminal;

or,

receiving a notification message sent by the terminal, the notification message indicating that the terminal has the related information of the CHO or CPAC;

sending a second request to the terminal according to the notification message; and

receiving the related information of the CHO or CPAC reported by the terminal according to the second request.

7. A method for optimizing configuration, executed by a terminal, comprising:

reporting related information of Conditional Handover (CHO) or Conditional Pscell Addition or Change (CPAC) to a network-side device,

wherein the related information of the CHO or CPAC comprises one or more of:

before or when performing the CHO or CPAC or when the CHO or CPAC is successful: Radio Link Management (RLM) of the terminal finding that there is an out-of-sync risk in a physical layer of a serving cell, or there is a failure risk in a radio link, or a first timer has been enabled;

an event triggering situation for configured CHO or CPAC;

performing cell selection after Radio Link Failure (RLF) or CHO failure occurs to the terminal, and selecting a CHO candidate cell;

an event triggering situation for the configured CPAC when the RLF occurs to the terminal in a Master Cell Group (MCG);

a Radio Resource Management (RRM) measurement value of at least a serving cell or a neighboring cell measured by the terminal when the first timer is enabled;

a time difference between enabling the first timer and receiving CHO or CPAC configuration;

at least a running situation of the first timer or a number of Radio Link Control (RLC) retransmissions when performing the CHO or CPAC or when the CHO or CPAC is successful;

at least one of an identifier (ID) of a CHO or CPAC candidate cell configured by the network side, an event associated with the CHO or CPAC candidate cell, or a threshold or

offset associated with the event;

random access (RA) information configured for the terminal by a cell where CHO or CPAC failure occurs;

a time difference between configuring the CHO or CPAC and successfully completing RA or Radio Resource Control (RRC) connection by the terminal in a target cell;

time information corresponding to the related information of the CHO or CPAC;

position information of the terminal corresponding to the related information of the CHO or CPAC; and

a measurement result of a wireless network corresponding to the related information of the CHO or CPAC.

8. The method of claim 7, wherein the event triggering situation for the configured CHO or CPAC comprise one of:

the configured CHO or CPAC being not triggered;

only one event being triggered for the configured CHO or CPAC;

one or multiple triggered events for the configured CHO or CPAC; or

whether one or multiple events for the configured CHO or CPAC are triggered.

9. The method of claim 7, wherein the event triggering situations for the configured CPAC when the RLF occurs to the terminal in the MCG comprise one of:

the configured CPAC being not triggered;

only one event being triggered for the configured CPAC;

one or multiple triggered events for the configured CPAC; or

whether one or multiple events for the configured CPAC are triggered.

10. The method of claim 7, further comprising:

acquiring configuration information of the network-side device, the configuration information configured to configure the terminal to report the related information of the CHO or CPAC.

11. The method of claim 7, wherein the network-side device comprises one of:

a network management function, a Trace Collection Entity (TCE), or a base station.

12. The method of claim 7, wherein reporting the related information of the CHO or CPAC to the network-side device comprises:

 sending an RRC reestablishment request message or a RLF report in a connected state or in a process of changing to the connected state, the RRC reestablishment request message or the RLF report comprising the related information of the CHO or CPAC;

 or,

 sending a message A in a process of performing two-step RA to the target cell, the message A comprising the related information of the CHO or CPAC.

13. The method of claim 7, wherein reporting the related information of the CHO or CPAC to the network-side device comprises:

 receiving a first request sent by the network-side device, and reporting the related information of the CHO or CPAC to the network-side device according to the first request;

 or,

 initiatively reporting the related information of the CHO or CPAC to the network-side device;

 or,

 sending a notification message, the notification message indicating that the terminal has the related information of the CHO or CPAC, receiving a second request sent by the network-side device; and reporting the related information of the CHO or CPAC to the network-side device according to the second request.

14. An apparatus for optimizing configuration, applied to a network-side device, comprising:

 a configuration module, configured to configure a terminal to report related information of Conditional Handover (CHO) or Conditional Pscell Addition or Change (CPAC),

 wherein the related information of the CHO or CPAC comprises one or more of:

 before or when performing the CHO or CPAC or when the CHO or CPAC is successful: Radio Link Management (RLM) of the terminal finding that there is an out-of-sync risk in a physical layer of a serving cell, or there is a failure risk in a radio link, or a first timer has been enabled;

 an event triggering situation for configured CHO or CPAC;

 performing cell selection after Radio Link Failure (RLF) or CHO failure occurs to the terminal, and selecting a CHO candidate cell;

an event triggering situation for the configured CPAC when the RLF occurs to the terminal in a Master Cell Group (MCG);

a Radio Resource Management (RRM) measurement value of at least a serving cell or a neighboring cell measured by the terminal when the first timer is enabled;

a time difference between enabling the first timer and receiving CHO or CPAC configuration;

at least a running situation of the first timer or a number of Radio Link Control (RLC) retransmissions when performing the CHO or CPAC or when the CHO or CPAC is successful;

at least one of an identifier (ID) of a CHO or CPAC candidate cell configured by the network side, an event associated with the CHO or CPAC candidate cell, or a threshold or offset associated with the event;

random access (RA) information configured for the terminal by a cell where CHO or CPAC failure occurs;

a time difference between configuring the CHO or CPAC and successfully completing RA or Radio Resource Control (RRC) connection by the terminal in a target cell;

time information corresponding to the related information of the CHO or CPAC;

position information of the terminal corresponding to the related information of the CHO or CPAC; and

a measurement result of a wireless network corresponding to the related information of the CHO or CPAC.

15. An apparatus for optimizing configuration, applied to a terminal, comprising:

a reporting module, configured to report related information of Conditional Handover (CHO) or Conditional Pscell Addition or Change (CPAC) to a network-side device,

wherein the related information of the CHO or CPAC comprises one or more of:

before or when performing the CHO or CPAC or when the CHO or CPAC is successful: Radio Link Management (RLM) of the terminal finding that there is an out-of-step risk in a physical layer of a serving cell, or there is a failure risk in a radio link, or a first timer has been enabled;

an event trigger situation for configured CHO or CPAC;

performing cell selection after Radio Link Failure (RLF) or CHO failure occurs to the terminal, and selecting a CHO candidate cell;

an event trigger situation for the configured CPAC when the RLF occurs to the terminal in a Master Cell Group (MCG);

a Radio Resource Management (RRM) measurement value of at least a serving cell or a neighboring cell measured by the terminal when the first timer is enabled;

a time difference between enabling the first timer and receiving CHO or CPAC configuration;

at least a timing condition of the first timer or a number of Radio Link Control (RLC) retransmissions when performing the CHO or CPAC or when the CHO or CPAC is successful;

at least one of an identifier (ID) of a CHO or CPAC candidate cell configured by the network side, an event associated with the CHO or CPAC candidate cell, or a threshold or offset associated with the event;

random access (RA) information configured for the terminal by a cell where CHO or CPAC failure occurs;

a time difference between configuring the CHO or CPAC and successfully completing RA or Radio Resource Control (RRC) connection by the terminal in a target cell;

time information corresponding to the related information of the CHO or CPAC;

position information of the terminal corresponding to the related information of the CHO or CPAC; and

a measurement result of a wireless network corresponding to the related information of the CHO or CPAC.

16. A network-side device, comprising:

a processor;

a memory; and

a program stored in the memory and executable by the processor,

the program implementing steps of the method of any one of claims 1 to 6 when the program is executed by the processor.

17. A terminal, comprising:

a processor;

a memory; and

a program stored on the memory and executable by the processor,

the program implementing steps of the method of any one of claims 7 to 13 when the program is executed by the processor.

18. A readable storage medium, having stored thereon a program, the program implementing steps of the method of any one of claims 1 to 13 when the program is executed by a processor.