CLAIMS

WHAT IS CLAIMED IS:

1. An indication method, performed by a terminal, comprising:

determining a first message, wherein the first message indicates a configuration parameter of joint channel estimation of a network device, wherein the configuration parameter comprises at least one of: indication information for indicating to the terminal that the network side device enables the joint channel estimation, or a parameter set or a fixed parameter value for determining a length of a Time Domain Window (TDW) of the joint channel estimation, the parameter set comprises one or more parameters;

based on the configuration parameter, determining a first parameter in the parameter set or determining the fixed parameter value as the first parameter; and

(i) determining the first parameter as the length of the TDW of the joint channel estimation,

performing the joint channel estimation based on a first strategy in response to a transmission time period being less than the first parameter, wherein the transmission time period is determined corresponding to the number of repetitions,

performing the joint channel estimation based on a second strategy in response to a remainder being obtained by dividing the transmission time period by the first parameter, wherein the transmission time period is determined corresponding to a number of blind retransmissions, or

(ii) determining a transmission time period corresponding to a number of repetitions, obtaining a second parameter by performing calculation on the transmission time period based on a predefined operation rule, and determining the second parameter as the length of the TDW for performing the joint channel estimation,

wherein each parameter in the parameter set or the fixed parameter value is determined based on a number of repetitions.

2. The indication method according to claim 1, wherein the predefined operation rule is a quotient operation; and

obtaining the second parameter by performing calculation on the transmission time period based on the predefined operation rule comprises:

determining the transmission time period corresponding to the number of repetitions, and determining a quotient value obtained by dividing the transmission time period by a predefined parameter value as the second parameter.

3. The indication method according to claim 1, wherein the second parameter is determined as the length of the TDW of the joint channel estimation, the method further comprising one of:

performing the joint channel estimation based on a third strategy in response to the second parameter being less than a first value;

or,

performing the joint channel estimation based on a fourth strategy in response to the transmission time period being not divisible by the second parameter.

4. The indication method according to claim 1, further comprising:

reporting assistance information for the network device to determine the configuration parameter for performing the joint channel estimation;

wherein reporting the assistance information comprises one of:

reporting the assistance information based on a MSG1;

or

reporting the assistance information based on a demodulation reference signal (DMRS).

5. The indication method according to claim 1, further comprising:

receiving a second message in response to the network device scheduling the terminal to perform MSG3 repetition, wherein the second message indicates a configuration parameter for the network device to perform the joint channel estimation during a repetition process to the terminal,

wherein the configuration parameter in the second message and the configuration parameter in the first message are the same or partially the same.

6. The indication method according to claim 1, wherein performing the joint channel estimation based on the first strategy comprises one of:

canceling the joint channel estimation; or

re-determining the length of the TDW of the joint channel estimation based on a predefined rule, and performing the joint channel estimation based on the re-determined length of the TDW of the joint channel estimation.

7. The indication method according to claim 1, wherein performing the joint channel estimation based on the second strategy comprises one of:

canceling the joint channel estimation; or

canceling a part of the joint channel estimation within the obtained remainder; or

re-determining the parameter based on a predefined rule, and performing the joint channel estimation based on the re-determined parameter; or

re-determining a time period corresponding to a remaining number of blind retransmissions as the length of the TDW based on a predefined rule, and performing the joint channel estimation based on the re-determined length of the TDW.

8. The indication method according to claim 3, wherein performing the joint channel estimation based on the third strategy comprises at least one of:

canceling the joint channel estimation;

re-determining the second parameter based on a predefined rule; or

re-determining the first parameter.

9. The indication method according to claim 3, wherein performing the joint channel estimation based on the fourth strategy comprises at least one of:

determining a lower bound of a time granularity for performing the joint channel estimation;

determining an integer multiple of the quotient value of the second parameter;

re-determining the second parameter based on a predefined rule; or

canceling the joint channel estimation.

10. The indication method according to claim 1, wherein,

the configuration parameter comprises enabling the joint channel estimation; and the first message is determined based on at least one of: remaining minimum system information (RMSI); a random access response (RAR); DCI with cyclic redundancy check (CRC) scrambled by a random access radio network temporary identifier (RA-RNTI); or DCI with CRC scrambled by a temporary cell radio network temporary identifier (TC-RNTI);

wherein the configuration parameter comprises the length of the TDW of the joint channel estimation; and the first message is determined based on at least one of: a predefined rule/communication protocol; RMSI; DCI with CRC scrambled by a RA-RNTI; DCI with CRC scrambled by a TC-RNTI; or uplink grant information in an RAR;

wherein the configuration parameter comprises enabling the joint channel estimation and the length of the TDW of the joint channel estimation; and the first message is determined based on at least one of: a predefined rule/communication protocol; DCI with CRC scrambled by a RA-RNTI; uplink grant information carried in an RAR; or DCI with CRC scrambled by a TC-RNTI.

11. An indication method, performed by a network device, comprising:

determining a first message, wherein the first message indicates a configuration parameter for the network device to perform joint channel estimation, wherein the configuration parameter comprises at least one of: indication information for indicating to the terminal that the network side device enables the joint channel estimation, or a parameter set or a fixed parameter value for determining a length of a Time Domain Window (TDW) of the joint channel estimation, the parameter set comprises one or more parameters;

based on the configuration parameter, determining a first parameter in the parameter set or determining the fixed parameter value as the first parameter;

wherein the first parameter is used for configuring the terminal to:

(i) determine the first parameter as the length of the TDW of the joint channel estimation,

perform the joint channel estimation based on a first strategy in response to a transmission time period being less than the first parameter, wherein the transmission time period is determined corresponding to the number of repetitions,

perform the joint channel estimation based on a second strategy in response to a remainder being

obtained by dividing the transmission time period by the first parameter, wherein the transmission time period is determined corresponding to a number of blind retransmissions, or

(ii) determine a transmission time period corresponding to a number of repetitions, obtaining a second parameter by performing calculation on the transmission time period based on a predefined operation rule, and determining the second parameter as the length of the TDW for performing the joint channel estimation;

wherein each parameter in the parameter set or the fixed parameter value is determined based on a number of repetitions.

12. The indication method according to claim 11, further comprising:

receiving assistance information for the network device to determine the configuration parameter for performing the joint channel estimation.

13. An indication device, comprising:

a processor; and

a memory for storing instructions executable by the processor;

wherein the processor is configured to perform the indication method according to any one of claims 1 to 10, or to perform the indication method according to any one of claims 11 to 12.