CLAIMS

1. A method for wireless communication, comprising:

reporting, by a terminal, in a first protocol layer, a first event to a second protocol layer, the first event being used to indicate that quality of a signal in a first signal set is poor enough to meet a first condition; and

in case that the terminal determines, in the second protocol layer, occurrence of a second event based on an occurrence situation of the first event, starting, by the terminal, a first timer in the second protocol layer, and determining, by the terminal, in the second protocol layer, at least one of a random access sequence or a random access resource for transmission based on a signal reporting situation provided by the first protocol layer about a second signal set during a duration of the first timer, a signal in the second signal set comprising: a Channel State Information Reference Signal (CSI-RS) or a Synchronization Signal/Physical Broadcast Channel (SS/PBCH) block, the random access sequence being a contention-based random access sequence or a contention-free random access sequence and the random access resource being a contention-based random access resource or a contention-free random access resource,

wherein the second event is used to indicate that link quality corresponding to the signal in the first signal set is poor enough to meet a second condition,

wherein determining, by the terminal, in the second protocol layer, the at least one of the random access sequence or the random access resource for transmission based on the signal reporting situation during the duration of the first timer comprises:

responsive to that the second protocol layer receives first report information from the first protocol layer during the duration of the first timer, determining, by the terminal, at least one of: the random access sequence for transmission is the contention-free random access sequence or the random access resource for transmission is the contention-free random access resource, the first report information being used to indicate at least one signal, of which quality is good enough to meet a third condition, in the second signal set.

2. The method of claim 1, wherein determining, by the terminal, in the second protocol layer, the at least one of the random access sequence or the random access resource for transmission based on the signal reporting situation during the duration of the first timer

comprises:

responsive to that the second protocol layer receives second report information from the first protocol layer during the duration of the first timer, determining, by the terminal, at least one of: the random access sequence for transmission is the contention-based random access sequence or the random access resource for transmission is the contention-based random access resource, the second report information being used to indicate that there is no signal, of which quality is good enough to meet a third condition, in the second signal set.

3. The method of claim 1, wherein determining, by the terminal, in the second protocol layer, the at least one of the random access sequence or the random access resource for transmission based on the signal reporting situation during the duration of the first timer comprises:

responsive to that the second protocol layer receives, from the first protocol layer during the duration of the first timer, no report information which is used to indicate at least one signal, of which quality is good enough to meet a third condition, in the second signal set, determining, by the terminal, at least one of: the random access sequence for transmission is the contention-based random access sequence or the random access resource for transmission is the contention-based random access resource.

4. The method of any one of claims 1-3, wherein starting, by the terminal, the first timer in the second protocol layer comprises:

starting, by the terminal, the first timer in the second protocol layer at a first moment, wherein the first moment comprises one of:

a moment at which occurrence of the second event is determined;

a moment at which the second protocol layer notifies the first protocol layer to stop reporting the first event after occurrence of the second event is determined;

a moment at which the second protocol layer notifies the first protocol layer to report a signal, of which signal quality is good enough to meet a third condition, in the second signal set after occurrence of the second event is determined; or

a moment at which the second protocol layer notifies the first protocol layer to measure a signal in the second signal set after occurrence of the second event is determined.

5. The method of any one of claims 1-4, further comprising:

responsive to that it is determined, based on the signal reporting situation, at least one of: the random access sequence is the contention-based random access sequence or the random access resource is the contention-based random access resource, determining, by the terminal, at least one of a corresponding contention-based random access sequence or contention-based random access resource based on a Radio Link Monitoring (RLM) measurement result.

6. The method of any one of claims 1-5, wherein the first protocol layer is a physical layer and the second protocol layer is a Media Access Control (MAC) layer.

7. A terminal, comprising a communication unit and a processing unit, wherein

the communication unit is configured to report, in a first protocol layer, a first event to a second protocol layer, the first event being used to indicate that quality of a signal in a first signal set is poor enough to meet a first condition; and

the processing unit is configured to, in case that occurrence of a second event is determined in the second protocol layer based on an occurrence situation of the first event, start a first timer in the second protocol layer, and determine, in the second protocol layer, at least one of a random access sequence or a random access resource for transmission based on a signal reporting situation provided by the first protocol layer about a second signal set during a duration of the first timer, a signal in the second signal set comprising: a Channel State Information Reference Signal (CSI-RS) or a Synchronization Signal/Physical Broadcast Channel (SS/PBCH) block, the random access sequence being a contention-based random access sequence or a contention-free random access sequence and the random access resource being a contention-based random access resource or a contention-free random access resource,

wherein the second event is used to indicate that link quality corresponding to the signal in the first signal set is poor enough to meet a second condition,

wherein the processing unit is further configured to:

responsive to that the second protocol layer receives first report information from the first protocol layer during the duration of the first timer, determine at least one of: the random access sequence for transmission is the contention-free random access sequence or the random access resource for transmission is the contention-free random

access resource, the first report information being used to indicate at least one signal, of which quality is good enough to meet a third condition, in the second signal set.

8. The terminal of claim 7, wherein the processing unit is further configured to:

responsive to that the second protocol layer receives second report information from the first protocol layer during the duration of the first timer, determine at least one of: the random access sequence for transmission is the contention-based random access sequence or the random access resource for transmission is the contention-based random access resource, the second report information being used to indicate that there is no signal, of which quality is good enough to meet a third condition, in the second signal set.

9. The terminal of claim 7, wherein the processing unit is further configured to:

responsive to that the second protocol layer receives, from the first protocol layer during the duration of the first timer, no report information which is used to indicate at least one signal, of which quality is good enough to meet a third condition, in the second signal set, determine at least one of: the random access sequence for transmission is the contention-based random access sequence or the random access resource for transmission is the contention-based random access resource.

10. The terminal of any one of claims 7-9, wherein the processing unit is further configured to:

start the first timer in the second protocol layer at a first moment, wherein the first moment comprises one of:

a moment at which occurrence of the second event is determined;

a moment at which the second protocol layer notifies the first protocol layer to stop reporting the first event after occurrence of the second event is determined;

a moment at which the second protocol layer notifies the first protocol layer to report a signal of, which signal quality is good enough to meet a third condition, in the second signal set after occurrence of the second event is determined; or

a moment at which the second protocol layer notifies the first protocol layer to measure a signal in the second signal set after occurrence of the second event is determined.

11. The terminal of any one of claims 7-10, wherein the processing unit is further configured to:

responsive to that it is determined, based on the signal reporting situation, at least one of: the random access sequence is the contention-based random access sequence or the random access resource is the contention-based random access resource, determining, by the terminal, at least one of a corresponding contention-based random access sequence or contention-based random access resource based on a Radio Link Monitoring (RLM) measurement result.

12. The terminal of any one of claims 7-11, wherein the first protocol layer is a physical layer and the second protocol layer is a Media Access Control (MAC) layer.