CLAIMS

1. A measurement reporting method, wherein the method comprises:

determining (301), by a user equipment, UE, whether to report a current measurement report to a network device based on a content of the current measurement report and a content of a previous measurement report.

2. The method according to claim 1, wherein determining (301), by the UE, whether to report the current measurement report to the network device based on the content of the current measurement report and the content of the previous measurement report, comprises at least one of:

determining (301a), by the UE, whether to report the current measurement report to the network device based on a neighbouring cell in the current measurement report and a neighbouring cell in the previous measurement report;

determining (301b), by the UE, whether to report the current measurement report to the network device based on a neighbouring cell meeting a first condition in the current measurement report and a neighbouring cell meeting the first condition in the previous measurement report;

determining (301c), by the UE, whether to report the current measurement report to the network device based on a difference between a measurement result of a first neighbouring cell meeting a second condition in the previous measurement report and a measurement result of the first neighboring cell in the current measurement report.

3. The method according to claim 2, wherein determining (301a), by the UE, whether to report the current measurement report to the network device based on the neighbouring cell in the current measurement report and the neighbouring cell in the previous measurement report, comprises:

when the neighbouring cell in the current measurement report changes compared with the neighbouring cell in the previous measurement report, determining, by the UE, to report the current measurement report to the network device;

or,

when the neighbouring cell in the current measurement report is unchanged compared with the previous measurement report, determining, by the UE, not to report the current measurement report to the network device.

4. The method according to claim 3, wherein the neighbouring cell in the current measurement report changing compared with the previous measurement report, comprises:

compared with the neighbouring cell in the previous measurement report, one of addition, replacement, and missing or a combination of more than one of addition, replacement, and missing occurring in the neighbouring cell in the current measurement report.

5. The method according to any one of claims 2 to 4, wherein determining, by the UE, whether to report the current measurement report to the network device based on the neighbouring cell meeting the first condition in the current measurement report and the neighbouring cell meeting the first condition in the previous measurement report, comprises:

when the neighbouring cell meeting the first condition in the current measurement report changes compared with the neighbouring cell meeting the first condition in the previous measurement report, determining, by the UE, to report the current measurement report to the network device;

or,

when the neighbouring cell meeting the first condition in the current measurement report is unchanged compared with the neighbouring cell meeting the first condition in the previous measurement report, determining, by the UE, not to report the current measurement report to the network device.

6. The method according to claim 5, wherein

the neighbouring cell meeting the first condition in the previous measurement report comprises:

top N neighbouring cell(s) in a first sorting of neighbouring cells in the previous measurement report; wherein N is a positive integer greater than or equal to 1; wherein the first sorting comprises: an order of signal quality values of the neighbouring cells in the previous measurement report from high to low;

the neighbouring cell meeting the first condition in the current measurement report comprises:

top N neighbouring cell(s) in a second sorting of neighbouring cells in the current measurement report; wherein the second sorting comprises: an order of signal quality values of the neighbouring cells in the current measurement report from high to low.

7. The method according to claim 6, wherein the neighbouring cell meeting the first condition in the current measurement report changing compared with the neighbouring cell meeting the first condition in the previous measurement report, comprises:

when the top N neighbouring cell(s) in the first sorting are consistent with the top N neighbouring cell in the top N neighbouring cell(s) in the second sorting, the order of the top

N neighbouring cell(s) in the first sorting changing compared with the order of the top N neighbouring cell(s) in the second sorting.

8. The method according to any one of claims 2 to 7, wherein the first neighbouring cell meeting the second condition in the previous measurement report is:

an M-th neighbouring cell in a first sorting of the signal quality value of the neighbouring cell in the previous measurement report from high to low; wherein M is a positive integer greater than or equal to 1.

9. The method according to claim 8, wherein determining, by the UE, whether to report the current measurement report to the network device based on the difference between the measurement result of the first neighbouring cell meeting the second condition in the previous measurement report and the measurement result of the first neighbouring cell in the current measurement report, comprises one of:

when the signal quality value of the first neighbouring cell in the previous measurement report is less than or equal to the signal quality value of the first neighbouring cell in the current measurement report, determining not to report the current measurement report to the network device;

when the signal quality value of the first neighbouring cell in the previous measurement report is greater than the signal quality value of the first neighbouring cell in the current measurement report, determining to report the current measurement report to the network device;

when the difference between the signal quality value of the first neighbouring cell in the previous measurement report and the signal quality value of the first neighbouring cell in the current measurement report exceeds a preset threshold, determining to report the current measurement report to the network device.

10. The method according to any one of claims 1 to 9, wherein the previous measurement report is: a measurement report that the UE most recently sent to the network device based on a measurement identifier associated with the measurement report.

11. The method according to any one of claims 1 to 10, wherein the measurement report comprises: a signal quality value of a neighbouring cell.

12. The method according to claim 11, wherein the signal quality value of the neighbouring cell comprises at least one of:

a measurement value of a reference signal received power (RSRP) of the neighbouring cell;

a measurement value of a reference signal received quality (RSRQ) of the neighbouring cell;

a measurement value of a signal to interference plus noise ratio (SINR) of the neighbouring cell.

13. The method according to claim 11 or 12, wherein the measurement reporting comprises at least one of:

measurement reporting triggered based on meeting an entry condition of a measurement event;

measurement reporting triggered based on meeting a leaving condition of a measurement event.

14. A measurement reporting method, wherein the method comprises:

in a case that a reporting type in a reporting configuration corresponding to a measurement identifier is set to event trigger, for a measurement event other than an event A1, an event A2, an event D1, an event X2, an event H1 or an event H2, in response to that an allowed cell addition and modification list defined in a measurement configuration parameter for the measurement identifier comprises a concerned cell, determining (601) any neighbouring cell detected based on a parameter in an associated measurement object to be an applicable cell; and/or

in a case that the reporting type in the reporting configuration corresponding to a measurement identifier is set to event trigger, for a measurement event other than the event A1, the event A2, the event D1, the event X2, the event H1 or the event H2, in response to that an excluded cell addition and modification list defined in the measurement configuration parameter of the measurement identifier does not comprise the concerned cell, determining (602) any neighbouring cell detected based on a parameter in an associated measurement object to be an applicable cell;

wherein the event A1 is an event that a serving cell measurement result is greater than a threshold;

the event A2 is an event that the serving cell measurement result is less than the threshold;

the event D1 is an event that a distance between a UE and a first reference position is greater than a first distance threshold, and a distance between the UE and a second reference position is less than a second distance threshold;

the event X2 is an event that a measurement value of an application layer 2 (L2) UE-to-Network Relay UE becomes lower than a third threshold;

the event H1 is an event that a height of the UE in an air exceeds a first threshold; and

the event H2 is an event that the height of the UE in the air is lower than a second threshold.

15. The method according to claim 14, wherein the measurement event other than the event A1, the event A2, the event D1, the event X2, the event H1 or the event H2 is an event other than any one or more of the event A1, the event A2, the event D1, the event X2, the event H1 or the event H2.

16. A measurement reporting apparatus (100), wherein the apparatus comprises:

a processing module (110), configured to, determine whether to report a measurement report to a network device based on a content of the current measurement report and a content of a previous measurement report.

17. The apparatus according to claim 16, wherein the processing module (110) is further configured to perform at least one of:

determining, by the UE, whether to report the current measurement report to the network device based on a neighbouring cell in the current measurement report and a neighbouring cell in the previous measurement report;

determining, by the UE, whether to report the current measurement report to the network device based on a neighbouring cell meeting a first condition in the current measurement report and a neighbouring cell meeting the first condition in the previous measurement report;

determining, by the UE, whether to report the current measurement report to the network device based on a difference between a measurement result of a first neighbouring cell meeting a second condition in the previous measurement report and a measurement result of the first neighbouring cell in the current measurement report.

18. The apparatus according to claim 17, wherein the processing module (110) is further configured to perform:

when the neighbouring cell meeting the first condition in the current measurement report changes compared with the neighbouring cell meeting the first condition in the previous measurement report, determining, by the UE, to report the current measurement report to the network device;

or,

when the neighbouring cell meeting the first condition in the current measurement report is unchanged compared with the neighbouring cell meeting the first condition in the previous measurement report, determining, by the UE, not to report the current measurement report to

the network device.

19. The apparatus according to claim 18, wherein

the neighbouring cell meeting the first condition in the previous measurement report comprises:

top N neighbouring cell(s) in a first sorting of neighbouring cells in the previous measurement report; wherein N is a positive integer greater than or equal to 1; wherein the first sorting comprises: an order of signal quality values of the neighbouring cells in the previous measurement report from high to low;

the neighbouring cell meeting the first condition in the current measurement report comprises:

top N neighbouring cell(s) in a second sorting of neighbouring cells in the current measurement report; wherein the second sorting comprises: an order of signal quality values of the neighbouring cells in the current measurement report from high to low.

20. A measurement reporting apparatus (200), wherein the apparatus comprises:

a processing module (210), configured to perform:

in a case that a reporting type in a reporting configuration corresponding to a measurement identifier is set to event trigger, for a measurement event other than an event A1, an event A2, an event D1, an event X2, an event H1 or an event H2, in response to that an allowed cell addition and modification list defined in a measurement configuration parameter for the measurement identifier comprises a concerned cell, determining any neighbouring cell detected based on a parameter in an associated measurement object to be an applicable cell; and/or

in a case that the reporting type in the reporting configuration corresponding to a measurement identifier is set to event trigger, for a measurement event other than the event A1, the event A2, the event D1, the event X2, the event H1 or the event H2, in response to that an excluded cell addition and modification list defined in the measurement configuration parameter of the measurement identifier does not comprise the concerned cell, determining any neighbouring cell detected based on a parameter in an associated measurement object to be an applicable cell;

wherein the event A1 is an event that a serving cell measurement result is greater than a threshold;

the event A2 is an event that the serving cell measurement result is less than the threshold;

the event D1 is an event that a distance between a UE and a first reference position is greater than a first distance threshold, and a distance between the UE and a second reference

position is less than a second distance threshold;

the event X2 is an event that a measurement value of an application layer 2 (L2) UE-to-Network Relay UE becomes lower than a third threshold;

the event H1 is an event that a height of the UE in an air exceeds a first threshold; and

the event H2 is an event that the height of the UE in the air is lower than a second threshold.