WIRELESS COMMUNICATION METHOD AND DEVICE

TECHNICAL FIELD

[0001] The present disclosure relates to the field of communication technology, in particular, relates to a wireless communication method and a wireless communication device.

BACKGROUND

[0002] In a future communication network, in order to ensure continuity in movement of terminals, enhance cooperation between networks, and increase transmission rates of terminals, it is necessary to coordinate between multiple networks to perform dual-way connection or even multiple-way connection, thereby ensuring transmission performance of the terminals.

[0003] In a dual-way connection or multiple-way connection process, there is one primary service node and one or more secondary service nodes, and the primary service node can implement main control functions for terminals, including functions such as accessing, paging, and adding/deleting/modifying an secondary service node, carrier configuration and measurement reporting configuration. The secondary service node mainly implements data transmission to and from the terminals.

[0004] How to perform measurement for the secondary service node is an urgent problem to be solved.

SUMMARY

[0005] Embodiments of the present application provide a wireless communication method and a wireless communication device, and a terminal device performs measurement and/or measurement result reporting on the secondary service node in the network according to the indication of the primary service node, so that the measurement and/or measurement result reporting of the secondary service node can be implemented.

[0006] In a first aspect, there is provided a wireless communication method, including:

[0007] sending, by a primary service node serving a terminal device in a first network, first information to the terminal device, wherein the first information is used to indicate the terminal device to perform measurement and/or measurement result reporting on a secondary service node in a second network.

[0008] In connection with the first aspect, in a possible implementation of the first

service node 20 for the terminal device 30, the primary service node 10 configures the terminal device 30 to perform measurement and/or measurement result reporting on the secondary service node 20, so that the terminal device 30 can perform measurement on the secondary service node 20 and report the measurement result to the primary service node 10, to assist the primary service node 10 in performing the configuration operation of the secondary service node.

[0089] In at least one embodiment, in the embodiment of the present application, the primary service node 10 or the secondary service node 20 can be a device that is in communication with a terminal device. The primary service node 10 or the secondary service node 20 can provide communication coverage for a particular geographic area and can communicate with a terminal device (e.g., UE) located within the coverage area. In at least one embodiment, the primary service node 10 or the secondary service node 20 can be a base station (Base Transceiver Station, BTS) in a GSM system or a CDMA system, or can be a base station (NodeB, NB) in a WCDMA system, or can be an evolved base station (Evolutional Node B, eNB or eNodeB) in an LTE system, or a wireless controller in a Cloud Radio Access Network (CRAN), or can be a relay station, an access point, an in-vehicle device, a wearable device, a network side device in a future 5G network or a network device in a Public Land Mobile Network (PLMN) evolved in the future, and the like.

[0090] Optionally, in the embodiment of the present application, the terminal device 30 can be mobile or fixed. Optionally, the terminal device 30 can refer to an access terminal, a user equipment (User Equipment, UE), a subscriber unit, a subscriber station, a mobile station, a mobile platform, a remote station, a remote terminal, a mobile device, a user terminal, a terminal, a wireless communication device, a user agent, or a user device. The access terminal can be a cellular phone, a cordless phone, a Session Initiation Protocol (SIP) phone, a Wireless Local Loop (WLL) station, a Personal Digital Assistant (PDA), a handheld device with wireless communication functional, a computing device or other processing device connected to a wireless modem, an in-vehicle device, a wearable device, a terminal device in future 5G networks, or a terminal device in future evolved PLMNs, and the like.

[0091] Optionally, the 5G system or network can also be referred to as a New Radio (NR) system or network.

[0092] Optionally, the wireless communication system 100 can further include other network entities, such as a network controller, a mobility management entity, and the like, which the embodiment of the present application does not limit.

[0093] It should be understood that the terms "system" and "network" are used interchangeably herein. The term "and/or" herein only describes an association between associated objects, indicating that there can be three relationships. For example, A and/or B can indicate three situations that: respectively only A exists, both A and B exist, and only B exists. In addition, the character "/" herein generally indicates that the associated objects in the context are in an "or" relationship.

[0094] FIG. 2 is a schematic flowchart of a wireless communication method 200 according to an embodiment of the present application. The method 200 is optionally applicable to the system shown in FIG. 1, but is not limited thereto. As shown in FIG. 2, the method 200 includes at least some of the following.

[0095] In 210, a primary service node serving a terminal device in a first network sends first information to the terminal device, wherein the first information is used to indicate the terminal device to perform measurement and/or measurement result reporting on a secondary service node in a second network.

[0096] Optionally, network types of the first network and the second network can be different. For example, the first network can be an NR network, and the second network can be an LTE network; or the first network can be an LTE network, or the second network can be an NR network.

[0097] Optionally, the secondary service node corresponding to the single measurement and/or the single measurement result reporting indicated by the first information includes at least two secondary service nodes.

[0098] Optionally, in an embodiment of the present application, the single measurement result reporting is triggered by a single event, and the object that needs to be measured for the event can include a plurality of secondary service nodes. A single measurement is a measurement required for a single measurement result report, and can include measurements on a plurality of secondary service nodes.

[0099] Optionally, the at least two secondary service nodes can be in the same network; or can be in different networks. In this case, the first network can include two types of networks.

[00100] Optionally, in an embodiment of the present application, the network device can implicitly or explicitly indicate a secondary service node on which the measurement and/or the measurement result reporting is performed.

[00101] Optionally, in an embodiment of the present application, the first information carries at least one of a frequency identifier (Identifier, ID), a node identifier ID, a cell ID, and a network type of the secondary service node.

[00102] In an implementation, the primary service node indicates the frequency ID of the secondary service node, and the terminal device can directly perform the measurement and/or the measurement result reporting with respect to the corresponding frequency according to the frequency ID, and can implement the measurement and/or the measurement result reporting with respect to the corresponding secondary service node.

[00103] In an implementation, the primary service node indicates a cell ID of the secondary service node, and the terminal device can perform measurement and/or measurement result reporting with respect to the corresponding cell according to the cell ID, and can implement the measurement and/or the measurement result reporting with respect to the corresponding secondary service node to which the cell ID belongs.

[00104] In an implementation, the primary service node indicates a network type to be measured, and the terminal device can perform measurement and/or measurement result reporting with respect to a currently serving secondary service cell of the network type and/or a detectable secondary service cell of the network type.

[00105] In an implementation, the primary service node indicates a node ID of the secondary service node to be measured, and the terminal device can perform measurement and/or measurement result reporting with respect to the secondary service node corresponding to the node ID.

[00106] Of course, in an embodiment of the present application, the first message can further carry at least two of a frequency ID, a node ID, a cell ID, and a network type of the secondary service node.

[00107] Optionally, in an embodiment of the present application, the first information can be used to indicate an event that triggers the terminal device to report the measurement result. If the event is met, the terminal device can report the measurement result.

[00108] Optionally, the at least two secondary service nodes can be secondary service nodes that are currently serving the terminal device, and by configuring the terminal device to perform measurement or measurement result reporting on the secondary service nodes that are currently serving the terminal device, the primary service node can determine which secondary service node to be deleted from the at least two secondary service nodes based on the measurement results of the at least two secondary service nodes.

[00109] Optionally, the at least two secondary service nodes can be secondary service nodes that are not currently serving the terminal device, and by configuring the terminal device to perform measurement or measurement result reporting on

the secondary service nodes that are not currently serving the terminal device, the primary service node can determine which secondary service node to be configured for the terminal device from the at least two secondary service nodes based on the measurement results of the at least two secondary service nodes.

[00110] Optionally, in an embodiment of the present application, the at least two service nodes can include at least one secondary service node that is currently serving the terminal device and a secondary service node that is not currently serving the terminal device. The terminal device can measure the at least one secondary service node that is currently serving the terminal device and the secondary service node that is not currently serving the terminal device, and report the measurement results to the network device, and the network device can determine whether to switch the secondary service node for the terminal device.

[00111] Optionally, the first information is used to indicate to the terminal device a first event for triggering the measurement result reporting; and the first event is used to indicate to perform measurement result reporting when a comparison result between the measurement results of the at least two secondary service nodes satisfies a triggering condition, and/or,

[00112] to perform measurement result reporting when comparison results respectively between the measurement results of the at least two secondary service nodes and predetermined values satisfy a triggering condition. The predetermined values respectively for comparing can be the same or can also be different.

[00113] In order to understand the present application more clearly, the following will described in connection with an example in which the at least two secondary service nodes includes at least one secondary service node (a first secondary service node) that is currently serving the terminal device and at least one secondary service node (second secondary service node) that is not currently serving the terminal device.

[00114] In an implementation, the first event is: a channel quality of a first cell of the second secondary service node being better than a channel quality of a second cell of the first secondary service node by at least a first predetermined value.

[00115] Optionally, the first cell includes at least one cell in which the second secondary service node being able to provide service for the terminal device, and the second cell includes all secondary service cells or the secondary service cell with the best channel quality in which the first secondary service node providing service for the terminal device.

[00116] Optionally, the first cell includes at least one cell in which the second secondary service node being able to provide service for the terminal device, and the second cell includes all cells, a cell having a channel quality, all service cell, the secondary service cell with the best

channel quality, a primary service cell or a secondary service cell in which the first secondary service node providing service for the terminal device.

[00117] In an implementation, the first event is: a channel quality of a third cell of the first secondary service node being worse than or equal to a second predetermined value, and a channel quality of a fourth cell of the second secondary service node being better than or equal to a third predetermined value.

[00118] Optionally, the third cell is all cells, a cell with the best channel quality, all service cells, a service cell with the best channel quality, or a primary service cell or a secondary service cell of the first secondary service node; and the fourth cell is at least one cell in which the second secondary service node being able to provide service for the terminal device.

[00119] Optionally, in an embodiment of the present application, the triggering of the event can be that a channel quality of a secondary service node satisfies a predetermined condition, and secondary service node configuration is performed on the terminal device according to the measurement result of the terminal device.

[00120] In an implementation, the first information indicates that the secondary service node that needs to be measured includes a third secondary service node, wherein the third secondary service node is a node that is currently serving the terminal device;

[00121] the first information is further used to indicate to the terminal device a second event for triggering the measurement result reporting; and

[00122] the second event is used to indicate that a channel quality of a service cell of the third secondary service node is better than or equal to a fourth predetermined value.

[00123] In an implementation, the first information indicates that the secondary service node on which the measurement and/or the measurement result reporting is to be performed includes a fourth secondary service node, wherein the fourth secondary service node is a node that is currently serving the terminal device; the first information is further used to indicate to the terminal device a third event for triggering the measurement result reporting; and

[00124] the third event is used to indicate that a channel quality of a fifth cell of the fourth secondary service node is worse than or equal to a fifth predetermined value.

[00125] Optionally, the fifth cell is all cells, a cell with the best channel quality, all service cells or a service cell with the best channel quality of the fourth secondary service node.

[00126] Optionally, in an embodiment of the present application, in different scenarios, a number of the secondary service nodes corresponding to the single measurement and/or

measurement result reporting configured by the primary service node can be different, and/or the networks to which belong the secondary service nodes corresponding to the single measurement and/or measurement result reporting configured by the primary service node can be different.

[00127] For example, in a scenario, a secondary service node corresponding to the single measurement and/or the single measurement result reporting configured by the primary service node is a secondary service node in the same network as the primary service node.

[00128] At this time, the corresponding trigger event can be the following events, wherein a neighboring cell can be a cell of the secondary service node.

[00129] Event A1 (serving becomes better than threshold), which means that the signal quality of the service cell of the primary service node is higher than a certain threshold. When an event that satisfies this condition is reported, the primary service node stops different-frequency/different-system measurement.

[00130] Event A2 (serving becomes worse than threshold), which means that the signal quality of the service cell of the primary service node is below a certain threshold. When an event that satisfies this condition is reported, the primary service node initiates different-frequency/different-system measurement.

[00131] Event A3 (neighbor becomes offset better than PCell/ PSCell), which means that a quality of a neighboring cell is higher than that of the service cell of the primary service node by a certain threshold and for a certain period of time. When an event that satisfies this condition is reported, the primary service node can initiate a handover request.

[00132] Event A4 (neighbor becomes better than threshold), which means that a quality of a neighboring area is higher than a certain threshold. When an event that satisfies this condition is reported, the primary service node can initiate a handover request.

[00133] Event A5 (PCell/ PSCell becomes worse than threshold 1 and neighbor becomes better than threshold 2), which means that the quality of the service cell is below a certain threshold and a quality of a neighboring cell is above a certain threshold.

[00134] Event A6 (Neighbor becomes offset better than SCell), which means that a quality of a neighboring cell is higher than that of the service cell of the primary service node by a certain threshold.

[00135] In another scenario, a secondary service node corresponding to the single

measurement and/or measurement result reporting with respect to a secondary service node of the same network, one field is for configuring measurement and/or measurement result reporting with respect to a secondary service node of a different network, and one field is for configuring measurement and/or measurement result reporting with respect to at least two secondary service nodes of different networks.

[00146] In an implementation, the first information includes a first field, wherein the first field identifies a network to which a secondary service node corresponding to the first information belongs and/or a number of the secondary service nodes corresponding to the first information.

[00147] Optionally, the network to which a secondary service node corresponding to the first information belongs and/or the number of the secondary service nodes corresponding to the first information is identified by a first field, which means that when the values in the first field are different, the network (for example, the network type) to which a secondary service node corresponding to the first information belongs is different and/or the number of the secondary service nodes corresponding to the first information is different.

[00148] Specifically, the first message includes a field A and a field B. When the value of the field A has a different value, the network to which a secondary service node indicated by the field B on which the measurement and/or the measurement result reporting is to be performed belongs and/or the number of the secondary service nodes need to be measured is different.

[00149] Wherein, the field A can include at least one bit; and the field B can include at least one bit.

[00150] For example, the field A includes 1 bit. When the value of the field A is 1, it indicates that the measurement and/or measurement result reporting configured in the field B is with respect one secondary service node of a different network. When the value of the field A is 0, it indicates that the measurement and/or measurement result reporting configured in the field B is with respect one secondary service node of the same network.

[00151] For example, the field A includes 1 bit. When the value of the field A is 1, it indicates that the measurement and/or measurement result reporting configured in the field B is with respect one secondary service node of a different network. When the value of the field A is 0, it indicates that the measurement and/or measurement result reporting configured in the field B is with respect two secondary service nodes of different networks.

[00152] For example, the field A includes 1 bit. When the value of the field A is 1, it indicates that the measurement and/or measurement result reporting configured in the field B

is with respect one secondary service node of the same network. When the value of the field A is 0, it indicates that the measurement and/or measurement result reporting configured in the field B is with respect one secondary service nodes of a different network.

[00153] Optionally, in the embodiment of the present application, the primary service node can perform deletion, addition, and modification of the secondary service node according to the measurement result reported by the terminal device, and can also perform handover of the primary service node according to the measurement result, that is, switching a secondary service node to a primary service node.

[00154] FIG. 3 is a schematic flowchart of a wireless communication method 300 according to an embodiment of the present application. As shown in FIG. 3, the method 300 includes at least some of the following.

[00155] In 310, a terminal device receives first information sent by a primary service node serving the terminal device in a first network, wherein the first information is used to indicate the terminal device to perform measurement and/or measurement result reporting on a secondary service node in a second network.

[00156] In 320, the measurement and/or measurement result reporting is performed on the secondary service node in the second network according to the first information.

[00157] Optionally, the secondary service node indicated by the first information on which the measurement and/or the measurement result reporting is to be performed includes at least two secondary service nodes.

[00158] Optionally, the at least two secondary service nodes include a first secondary service node and a second secondary service node;

[00159] wherein, the first secondary service node is a node that is currently serving the terminal device, and the second secondary service node is a node that is not currently serving the terminal device.

[00160] Optionally, the first information is further used to indicate to the terminal device a first event for triggering the measurement result reporting; and

[00161] the first event is used to indicate to perform measurement result reporting when a comparison result between the measurement results of the at least two secondary service nodes satisfies a triggering condition, and/or,

[00162] to perform measurement result reporting when comparison results respectively between the measurement results of the at least two secondary service nodes and predetermined values satisfy a triggering condition.

[00163] Optionally, the first event is:

[00164] a channel quality of a first cell of the second secondary service node being better than a channel quality of a second cell of the first secondary service node by at least a first predetermined value.

[00165] Optionally, the first cell includes at least one cell in which the second secondary service node being able to provide service for the terminal device; and

[00166] the second cell includes all secondary service cells or the secondary service cell with the best channel quality in which the first secondary service node providing service for the terminal device.

[00167] Optionally, the first cell includes at least one cell in which the second secondary service node being able to provide service for the terminal device; and

[00168] the second cell includes all cells, a cell having a channel quality, all service cell, the secondary service cell with the best channel quality, a primary service cell or a secondary service cell in which the first secondary service node providing service for the terminal device.

[00169] Optionally, the first event is:

[00170] a channel quality of a third cell of the first secondary service node being worse than or equal to a second predetermined value, and a channel quality of a fourth cell of the second secondary service node being better than or equal to a third predetermined value.

[00171] Optionally, the third cell is all cells, a cell with the best channel quality, all service cells, a service cell with the best channel quality, or a primary service cell or a secondary service cell of the first secondary service node; and

[00172] the fourth cell is at least one cell in which the second secondary service node being able to provide service for the terminal device.

[00173] Optionally, the first information indicates that the secondary service node that needs to be measured includes a third secondary service node, wherein the third secondary service node is a node that is currently serving the terminal device;

[00174] the first information is further used to indicate to the terminal device a second event for triggering the measurement result reporting; and

[00175] the second event is used to indicate that a channel quality of a service cell of the third secondary service node is better than or equal to a fourth predetermined value.

[00176] Optionally, the first information indicates that the secondary service node on which the measurement and/or the measurement result reporting needs to be performed includes a fourth service node, wherein the fourth service node is a node currently serving the

terminal device.

[00177] The first information is further used to indicate to the terminal device a third event for triggering the measurement result reporting; and

[00178] the third event is used to indicate that a channel quality of a fifth cell of the third service node is worse than or equal to a fifth predetermined value.

[00179] Optionally, the fifth cell is all cells, a cell with the best channel quality, all service cells or a service cell with the best channel quality of the fourth secondary service node.

[00180] Optionally, the first information is carried in a first message, wherein the first message includes a field A and a field B. When the value of the field A has a different value, the network to which a secondary service node indicated by the field B on which the measurement belongs and/or the measurement result reporting is to be performed and/or the number of the secondary service nodes need to be measured is different.

[00181] Optionally, the first information includes a first field, wherein the first field identifies a network to which the secondary service node corresponding to the first information belongs and/or a number of the secondary service nodes corresponding to the first information.

[00182] Optionally, the first information includes a second field, wherein the second field identifies a network to which the secondary service node corresponding to the measurement and/or the measurement result reporting belongs and/or a number of secondary service nodes that need to be measured.

[00183] Optionally, the first information is carried in a first message, wherein the first message includes at least two third fields, and different third fields in the at least two third fields indicate different networks to which belong the secondary service nodes on which the measurement and/or the measurement result reporting is to be performed and/or numbers of secondary service nodes to be measured are different.

[00184] Optionally, the first information carries at least one of a frequency identifier, a node identifier ID, a cell ID, or a network type of the secondary service node.

[00185] Optionally, a network type of the first network is different from a network type of the second network.

[00186] It should be understood that, in an embodiment of the present application, the description of the method 300 shown in FIG. 3 can refer to the method 200 shown in FIG. 2, and details are not repeated herein for brevity.

[00187] FIG. 4 is a schematic block diagram of a service node 400 according to an embodiment of the present application. The service node is a primary service node serving a

terminal device in a first network. As shown in FIG. 4, the service node 400 includes a processing unit 410 and a communication unit 420.

[00188] The processing unit is configured to determine first information, wherein the first information is used to indicate the terminal device to perform measurement and/or measurement result reporting on a secondary service node in a second network; and the communication unit 420 is configured to send the first information to the terminal device.

[00189] Optionally, the secondary service node corresponding to the single measurement and/or the single measurement result reporting indicated by the first information includes at least two secondary service nodes.

[00190] Optionally, the at least two secondary service nodes include a first secondary service node and a second secondary service node;

[00191] wherein the first secondary service node is a node that is currently serving the terminal device, and the second secondary service node is a node that is not currently serving the terminal device.

[00192] Optionally, the first information is further used to indicate to the terminal device a first event for triggering the measurement result reporting; and

[00193] the first event is used to indicate to perform measurement result reporting when a comparison result between the measurement results of the at least two secondary service nodes satisfies a triggering condition, and/or,

[00194] to perform measurement result reporting when comparison results respectively between the measurement results of the at least two secondary service nodes and predetermined values satisfy a triggering condition.

[00195] Optionally, the first event is:

[00196] a channel quality of a first cell of the second secondary service node being better than a channel quality of a second cell of the first secondary service node by at least a first predetermined value.

[00197] Optionally, the first cell includes at least one cell in which the second secondary service node being able to provide service for the terminal device; and

[00198] the second cell includes all secondary service cells or the secondary service cell with the best channel quality in which the first secondary service node providing service for the terminal device.

[00199] Optionally, the first cell includes at least one cell in which the second secondary service node being able to provide service for the terminal device; and

[00200] the second cell includes all cells, a cell having a channel quality, all service cell, the secondary service cell with the best channel quality, a primary service cell or a secondary service cell in which the first secondary service node providing service for the terminal device.

[00201] Optionally, the first event is:

[00202] a channel quality of a third cell of the first secondary service node being worse than or equal to a second predetermined value, and a channel quality of a fourth cell of the second secondary service node being better than or equal to a third predetermined value.

[00203] Optionally, the third cell is all cells, a cell with the best channel quality, all service cells, a service cell with the best channel quality, or a primary service cell or a secondary service cell of the first secondary service node; and

[00204] the fourth cell is at least one cell in which the second secondary service node being able to provide service for the terminal device.

[00205] Optionally, the first information indicates that the secondary service node that needs to be measured includes a third secondary service node, wherein the third secondary service node is a node that is currently serving the terminal device;

[00206] the first information is further used to indicate to the terminal device a second event for triggering the measurement result reporting; and

[00207] the second event is used to indicate that a channel quality of a service cell of the third secondary service node is better than or equal to a fourth predetermined value.

[00208] Optionally, the first information indicates that the secondary service node on which the measurement and/or the measurement result reporting needs to be performed includes a fourth service node, wherein the fourth service node is a node currently serving the terminal device.

[00209] The first information is further used to indicate to the terminal device a third event for triggering the measurement result reporting; and

[00210] the third event is used to indicate that a channel quality of a fifth cell of the third service node is worse than or equal to a fifth predetermined value.

[00211] Optionally, the fifth cell is all cells, a cell with the best channel quality, all service cells or a service cell with the best channel quality of the fourth secondary service node.

[00212] Optionally, the first information includes a first field, wherein the first field identifies a network to which the secondary service node corresponding to the first information

belongs and/or a number of the secondary service nodes corresponding to the first information.

[00213] Optionally, the first information is carried in a first message, wherein the first information includes a second field, and the second field identifies a network to which the secondary service node corresponding to the measurement and/or the measurement result reporting belongs and/or a number of secondary service nodes that need to be measured.

[00214] Optionally, the first information carries at least one of a frequency identifier, a node identifier ID, a cell ID, or a network type of the secondary service node.

[00215] Optionally, a network type of the first network is different from a network type of the second network.

[00216] Optionally, the communication unit 420 is further configured to receive a measurement report sent by the terminal device; and

[00217] the processing unit 410 is further configured to perform secondary service node configuration for the terminal device according to the measurement report, and the configuration includes adding, modifying, and deleting the secondary service node.

[00218] It should be understood that the service node 400 can correspond to the primary service node in the method embodiment, and can the implement corresponding operations implemented by the primary service node in the method embodiment, details of which will not be repeated herein for brevity.

[00219] FIG. 5 is a schematic block diagram of a terminal device 500 according to an embodiment of the present application. As shown in FIG. 5, the terminal device 500 includes a communication unit 510 and a processing unit 520.

[00220] The communication unit 510 is configured to receive first information sent by a primary service node serving the terminal device in a first network, wherein the first information is used to indicate the terminal device to perform measurement and/or measurement result reporting on a secondary service node in a second network.

[00221] The processing unit 520 is configured to perform measurement and/or measurement result reporting on the secondary service node in the second network according to the first information.

[00222] Optionally, the secondary service node corresponding to the single measurement and/or the single measurement result reporting indicated by the first information includes at least two secondary service nodes.

[00223] Optionally, the at least two secondary service nodes include a first secondary service node and a second secondary service node;

[00224] wherein the first secondary service node is a node that is currently serving the terminal device, and the second secondary service node is a node that is not currently serving the terminal device.

[00225] Optionally, the first information is further used to indicate to the terminal device a first event for triggering the measurement result reporting; and

[00226] the first event is used to indicate to perform measurement result reporting when a comparison result between the measurement results of the at least two secondary service nodes satisfies a triggering condition, and/or,

[00227] to perform measurement result reporting when comparison results respectively between the measurement results of the at least two secondary service nodes and predetermined values satisfy a triggering condition.

[00228] Optionally, the first event is:

[00229] a channel quality of a first cell of the second secondary service node being better than a channel quality of a second cell of the first secondary service node by at least a first predetermined value.

[00230] Optionally, the first cell includes at least one cell in which the second secondary service node being able to provide service for the terminal device; and

[00231] the second cell includes all secondary service cells or the secondary service cell with the best channel quality in which the first secondary service node providing service for the terminal device.

[00232] Optionally, the first cell includes at least one cell in which the second secondary service node being able to provide service for the terminal device; and

[00233] the second cell includes all cells, a cell having a channel quality, all service cell, the secondary service cell with the best channel quality, a primary service cell or a secondary service cell in which the first secondary service node providing service for the terminal device.

[00234] Optionally, the first event is:

[00235] a channel quality of a third cell of the first secondary service node being worse than or equal to a second predetermined value, and a channel quality of a fourth cell of the second secondary service node being better than or equal to a third predetermined value.

[00236] Optionally, the third cell is all cells, a cell with the best channel quality, all service cells, a service cell with the best channel quality, or a primary service cell or a secondary service cell of the first secondary service node; and

[00237] the fourth cell is at least one cell in which the second secondary service node

being able to provide service for the terminal device.

[00238] Optionally, the first information indicates that the secondary service node that needs to be measured includes a third secondary service node, wherein the third secondary service node is a node that is currently serving the terminal device;

[00239] the first information is further used to indicate to the terminal device a second event for triggering the measurement result reporting; and

[00240] the second event is used to indicate that a channel quality of a service cell of the third secondary service node is better than or equal to a fourth predetermined value.

[00241] Optionally, the first information indicates that the secondary service node on which the measurement and/or the measurement result reporting needs to be performed includes a fourth service node, wherein the fourth service node is a node currently serving the terminal device.

[00242] The first information is further used to indicate to the terminal device a third event for triggering the measurement result reporting; and

[00243] the third event is used to indicate that a channel quality of a fifth cell of the third service node is worse than or equal to a fifth predetermined value.

[00244] Optionally, the fifth cell is all cells, a cell with the best channel quality, all service cells or a service cell with the best channel quality of the fourth secondary service node.

[00245] Optionally, the first information is carried in the first message, where the first message includes a first field and a second field, and when the first field takes a different value, a network to which the secondary service node and/or a number of secondary service nodes corresponding to the single measurement belongs and/or the single measurement result reporting indicated by the second field is different.

[00246] Optionally, the first information includes a second field, and the second field identifies a network to which the secondary service node corresponding to the measurement and/or the measurement result reporting belongs and/or a number of secondary service nodes that need to be measured.

[00247] Optionally, a network type of the first network is different from a network type of the second network.

[00248] It should be understood that the terminal device 500 can correspond to the terminal device in the method embodiment, and can implement the corresponding operations implemented by the terminal device in the method embodiment, details of which will not be repeated herein for brevity.

[00249] FIG. 6 is a schematic structural diagram of a system chip 600 according to an

embodiment of the present application. The system chip 600 of FIG. 6 includes an input interface 601, an output interface 602, a processor 603, and a memory 604 that can be connected by an internal communication connection line. The processor 603 is configured to execute codes in the memory 604.

[00250] Optionally, when the codes are executed, the processor 603 implements a method performed by the primary service node in the method embodiment. For the sake of brevity, it will not be repeated herein.

[00251] Optionally, when the codes are executed, the processor 603 implements a method performed by the terminal device in the method embodiment. For the sake of brevity, it will not be repeated herein.

[00252] FIG. 7 is a schematic block diagram of a communication device 700 according to an embodiment of the present application. As shown in FIG. 7, the communication device 700 includes a processor 710 and a memory 720. The memory 720 can store program codes, and the processor 710 can execute the program codes stored in the memory 720.

[00253] Optionally, as shown in FIG. 7, the communication device 700 can include a transceiver 730, and the processor 710 can control the transceiver 730 to communicate with external entities.

[00254] Optionally, the processor 710 can call the program codes stored in the memory 720 to perform the corresponding operations of the primary service node in the method embodiment. For the sake of brevity, it will not be repeated herein.

[00255] Optionally, the processor 710 can call the program codes stored in the memory 720 to perform the corresponding operations of the terminal device in the method embodiment. For the sake of brevity, it will not be repeated herein.

[00256] It should be understood that the processor of the embodiment of the present application can be an integrated circuit chip with signal processing capability. In the implementation process, each step of the above method embodiment can be completed by an integrated logic circuit of hardware in a processor or an instruction in a form of software. The processor can be a general-purpose processor, a digital signal processor (DSP), an application specific integrated circuit (ASIC), a Field Programmable Gate Array (FPGA), a programmable logic device, discrete gates or transistor logic devices, discrete hardware components. The methods, steps, and logical block diagrams disclosed in embodiments of the present application can be implemented or executed. The general purpose processor can be a microprocessor or the processor or any conventional processor or the like. The steps of the method disclosed in embodiments of the present application can be directly implemented by the hardware decoding

WHAT IS CLAIMED IS:

1. A wireless communication method, comprising:

sending, by a primary service node serving a terminal device in a first network, first information to the terminal device, wherein the first information is used to indicate the terminal device to perform measurement and/or measurement result reporting on a secondary service node in a second network, wherein the secondary service node in the second network is a network service node same as or different from that of the primary service node,

wherein the secondary service node corresponding to a single measurement and/or a single measurement result reporting indicated by the first information comprises at least a first secondary service node and a second secondary service node,

wherein the first secondary service node is a node that is serving the terminal device, and the second secondary service node is a node that is not serving the terminal device,

wherein the first information is further used to indicate to the terminal device a first event for triggering the measurement result reporting; and

the first event is used to indicate to perform measurement result reporting when a comparison result between measurement results of the at least two secondary service nodes satisfies a triggering condition, and/or,

to perform measurement result reporting when comparison results respectively between the measurement results of the at least two secondary service nodes and predetermined values satisfy a triggering condition.

2. The method according to claim 1, wherein the first event is:

a channel quality of a first cell of the second secondary service node being better than a channel quality of a second cell of the first secondary service node by at least a first predetermined value.

3. The method according to claim 2, wherein:

the first cell comprises at least one cell in the second secondary service node being able to provide service for the terminal device; and

the second cell comprises all secondary service cells, the secondary service cell with the best channel quality, all cells, a cell having a channel quality, all service cell, the secondary service cell with the best channel quality, a primary service cell or a secondary service cell in the first secondary service node providing service for the terminal device.

4. The method according to claim 1, wherein the first event is:

a channel quality of a third cell of the first secondary service node being worse than or equal to a second predetermined value, and a channel quality of a fourth cell of the second secondary service node being better than or equal to a third predetermined value,

wherein the third cell comprises all cells, a cell with the best channel quality, all service cells, a service cell with the best channel quality, a primary service cell or a secondary service cell of the first secondary service node; and

the fourth cell comprises at least one cell in the second secondary service node being able to provide service for the terminal device.

5. The method according to claim 1, wherein the first information indicates that the secondary service node that needs to be measured comprises a third secondary service node, wherein the third secondary service node is a node that is currently serving the terminal device;

the first information is further used to indicate to the terminal device a second event for triggering the measurement result reporting; and

the second event is used to indicate that a channel quality of a secondary service cell of the third secondary service node is better than or equal to a fourth predetermined value.

6. The method according to claim 1, wherein the first information indicates that the secondary service node on which the measurement and/or the measurement result reporting needs to be performed comprises a fourth secondary service node, wherein the fourth secondary service node is a node that is currently serving the terminal device;

the first information is further used to indicate to the terminal device a third event for triggering the measurement result reporting; and

the third event is used to indicate that a channel quality of a fifth cell of the fourth secondary service node is worse than or equal to a fifth predetermined value,

wherein the fifth cell comprises all cells, a cell with the best channel quality, all service cells or a service cell with the best channel quality of the fourth secondary service node.

7. The method according to claim 1, wherein:

the first information comprises a first field, wherein the first field identifies at least one of a network to which the secondary service node corresponding to the first information belongs or a number of the secondary service nodes corresponding to the first information, or

the first information comprises a second field, and the second field identifies at least one of a network to which the secondary service node corresponding to the at least one of the measurement or the measurement result reporting belongs or a number of secondary service nodes that need to be measured, or

the first information carries at least one of a frequency identifier, a node identifier ID, a cell ID, and a network type of the secondary service node.

8. A wireless communication method, comprising:

receiving, by a terminal device, first information sent by a primary service node serving the terminal device in a first network, wherein the first information is used to indicate the terminal device to perform measurement and/or measurement result reporting on a secondary service node in a second network; and

performing the measurement and/or measurement result reporting on the secondary service node in the second network according to the first information,

wherein the secondary service node in the second network is a network service node same as or different from that of the primary service node, and

wherein the secondary service node corresponding to a single measurement and/or a single measurement result reporting indicated by the first information comprises at least a first secondary service node and a second secondary service node, and the first secondary service node is a node that is serving the terminal device, and the second secondary service node is a node that is not serving the terminal device,

wherein the first information is further used to indicate to the terminal device a first event for triggering the measurement result reporting; and

the first event is used to indicate to perform measurement result reporting when a comparison result between the measurement results of the at least two secondary service nodes satisfies a triggering condition, and/or,

to perform measurement result reporting when comparison results respectively between the measurement results of the at least two secondary service nodes and predetermined values satisfy a triggering condition.

9. The method according to claim 8, wherein the first event is:

a channel quality of a first cell of the second secondary service node being better than a channel quality of a second cell of the first secondary service node by at least a first

predetermined value.

10. The method according to claim 9, wherein the first cell comprises at least one cell in the second secondary service node being able to provide service for the terminal device; and

the second cell comprises all secondary service cells, the secondary service cell with the best channel quality, all cells, a cell having a channel quality, all service cell, the secondary service cell with the best channel quality, a primary service cell or a secondary service cell in the first secondary service node providing service for the terminal device.

11. The method according to claim 8, wherein the first event is:

a channel quality of a third cell of the first secondary service node being worse than or equal to a second predetermined value, and a channel quality of a fourth cell of the second secondary service node being better than or equal to a third predetermined value,

the third cell comprises all cells, a cell with the best channel quality, all service cells, a service cell with the best channel quality, a primary service cell or a secondary service cell of the first secondary service node; and

the fourth cell comprises at least one cell in the second secondary service node being able to provide service for the terminal device.

12. The method according to claim 8, wherein the first information indicates that the secondary service node that needs to be measured comprises a third secondary service node, wherein the third secondary service node is a node that is currently serving the terminal device;

the first information is further used to indicate to the terminal device a second event for triggering the measurement result reporting; and

the second event is used to indicate that a channel quality of a service cell of the third secondary service node is better than or equal to a fourth predetermined value.

13. The method according to claim 8, wherein the first information indicates that the secondary service node on which the measurement and/or the measurement result reporting needs to be performed comprises a fourth secondary service node, wherein the fourth secondary service node is a node that is currently serving the terminal device;

the first information is further used to indicate to the terminal device a third event for triggering the measurement result reporting; and

the third event is used to indicate that a channel quality of a fifth cell of the fourth

secondary service node is worse than or equal to a fifth predetermined value,

wherein the fifth cell comprises all cells, a cell with the best channel quality, all service cells or a service cell with the best channel quality of the fourth secondary service node.

14. The method according to claim 8, wherein the first information comprises a first field, and the first field identifies at least one of a network to which the secondary service node corresponding to the first information belongs or a number of the secondary service nodes corresponding to the first information, or

the first information comprises a second field, and the second field identifies at least one of a network to which the secondary service node corresponding to the at least one of the measurement or the measurement result reporting belongs or a number of secondary service nodes that need to be measured, or

the first information carries at least one of a frequency identifier, a node identifier ID, a cell ID, or a network type of the secondary service node.

15. A service node configured to perform the method according to any one of claims 1-7.

16. A terminal device configured to perform the method according to any one of claims 8-14.