CLAIMS

1. A method for wireless communication, comprising:

calculating, by a terminal device, at least one Power Headroom Report, PHR, to be reported to a first network node based on a transmission channel on a first uplink between the terminal device and the first network node, wherein the terminal device is served by the first network node and a second network node; and

reporting, by the terminal device, the calculated at least one PHR to the first network node through the first uplink,

wherein the at least one PHR to be reported to the first network node is associated with a communication quality index of a channel between the first network node and the second network node, and one or more PHRs among the at least one PHR is/are reported to the first network node based on the communication quality index.

2. The method of claim 1, wherein the communication quality index comprises link capacity and/or delay and/or reliability.

3. The method of claim 1 or 2, wherein the first network node communicates with the terminal device through a first carrier, and the second network node communicates with the terminal device through a second carrier.

4. The method of claim 3, wherein

the first carrier is a carrier in a first carrier group, and the second carrier is a carrier in a second carrier group that is not the first carrier group; or,

the first carrier is a carrier of a communication system adopting a first communication mode, and the second carrier is a carrier of a communication system adopting a second communication mode that is not the first communication mode.

5. The method of claim 4, wherein

the first communication mode is a Long Term Evolution, LTE, communication mode, and the second communication mode is a New Radio, NR, communication mode; or

the first communication mode is an NR communication mode, and the second communication mode is an LTE communication mode.

6. The method of claim 4 or 5, wherein the first carrier and the second carrier completely or partially overlap in a frequency domain.

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

the processing unit is configured to calculate at least one Power Headroom Report, PHR, to be reported to a first network node based on a transmission channel on a first uplink between the terminal device and the first network node, the terminal device being served by the first network node and a second network; and

the communication unit is configured to report the calculated at least one PHR to the first network node through the first uplink;

wherein the at least one PHR to be reported to the first network node is associated with a communication quality index of a channel between the first network node and the second network node, and one or more PHRs among the at least one PHR is/are reported to the first network node based on the communication quality index.

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

calculate a first PHR by use of the transmission channel on the first uplink without considering a transmission channel on a second uplink between the terminal device and the second network node,

wherein the at least one PHR reported to the first network node by the communication unit comprises the first PHR.

9. The terminal device of claim 8, wherein the communication unit is further configured to:

report the calculated first PHR to the second network node through the second uplink.

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

calculate a second PHR by use of the transmission channel on the first uplink and in combination with a transmission channel on a second uplink between the terminal device and the second network node,

wherein the at least one PHR reported to the first network node by the communication unit comprises the second PHR.

11. The terminal device of claim 10, wherein the communication unit is further configured to:

report the calculated second PHR to the second network node through the second uplink.

12. The terminal device of any one of claims 7-11, wherein

the processing unit is further configured to:

calculate a third PHR by use of a transmission channel on a second uplink without considering the transmission channel on the first uplink between the terminal device and the first network node; and

the communication unit is further configured to:

report the calculated third PHR to the second network node through the second uplink, or

report the calculated third PHR to the first network node through the first uplink.

13. The terminal device of any one of claims 7-12, wherein the communication unit is further configured to:

receive Physical Downlink Control Channels, PDCCHs, or Physical Downlink Shared Channels, PDSCHs, simultaneously transmitted to a first terminal device by the first network node and the second network node.

14. The terminal device of any one of claims 7-13, wherein the processing unit is further configured to:

determine the at least one PHR to be reported to the first network node according to a network configuration or preset information.