CLAIMS

1. A method for data distribution, applied to a service access management node, the method comprising:

receiving an access state report from each of at least one access device, wherein the access state report comprises at least one piece of network state information for characterizing a network state of an access network provided by the access device; and

determining a distributed data amount corresponding to the access device based on a data stream to be transmitted and the network state information of the access network provided by the access device.

2. The method of claim 1, wherein when the access network provided by the access device is an access network supporting a non-3rd generation partnership project (3GPP) specification, the access state report comprises at least one piece of the following network state information: basic service set (BSS) load information, wide area network (WAN) metrics information, a utilization rate of an available channel, a data amount to be transmitted, or a number of accessed user equipments (UEs).

3. The method of claim 1, wherein when the access network provided by the access device is an access network supporting a 3GPP specification, the access state report comprises at least one piece of the following network state information: load information of the access network, a number of accessed UEs of the access network, a data amount to be transmitted presently cached by the access network, a present resource utilization rate of the access network, a user throughput of the access network within a preset time period, or information about a data packet that is not transmitted correctly by the access network.

4. The method of claim 3, wherein the information about the data packet that is not transmitted correctly by the access network comprises at least one of:

a sequence number of a data packet that has been transmitted but not transmitted successfully by the access network;

a minimum sequence number among sequence numbers of data packets to be transmitted by the access network; or

a proportion of a number of data packets that are transmitted wrongly by the access network to a total number of data packets that are transmitted by the access network within the preset time period.

5. The method of claim 1, further comprising: before receiving the access state report from each of the at least one access device,

transmitting a request message for the access state report to the access device.

6. The method of claim 1, wherein receiving the access state report from each of the at least one access device comprises:

receiving the access state report from the access device according to a preset periodic interval.

7. The method of claim 1, wherein receiving the access state report from each of the at least one access device comprises:

receiving the access state report transmitted by the access device based on a preset triggering event.

8. The method of claim 1, wherein determining the distributed data amount corresponding to the access device based on the data stream to be transmitted and the network state information of the access network provided by the access device comprises:

allocating, according to a set weight allocation strategy, a weight to the network state information of the access network provided by the access device;

determining, based on the network state information of the access network provided by the access device and the weight corresponding to the network state information, a data distribution calculated value corresponding to the access network provided by the access device; and

dividing the data stream to be transmitted based on the data distribution calculated value corresponding to the access network provided by the access device to determine the distributed data amount corresponding to the access device.

9. A method for data distribution, applied to an access device, the method comprising:

transmitting an access state report of an access network provided by the access device to a service access management node, wherein the access state report comprises at least one piece of network state information for characterizing a network state of the access network provided by the access device, and is used for the service access management node to determine a distributed data amount corresponding to the access device according to a data stream to be transmitted.

10. The method of claim 9, wherein when the access network provided by the access device is an access network supporting a non-3rd generation partnership project (3GPP) specification, the access state report comprises at least one piece of the following network state information: basic service set (BSS) load information, wide area network (WAN) metrics information, a utilization rate of an available channel, a data amount to be transmitted, or a number of accessed user equipments (UEs).

11. The method of claim 9, wherein when the access network provided by the access device is an access network supporting a 3GPP specification, the access state report comprises at least one piece of the following network state information: load information of the access network, a number of accessed UEs of the access network, a data amount to be transmitted presently cached by the access network, a present resource utilization rate of the access network, a user throughput of the access network within a preset time period, or information about a data packet that is not transmitted correctly by the access network.

12. The method of claim 9, wherein transmitting the access state report of the access network provided by the access device to the service access management node comprises:

transmitting the access state report of the access network provided by the access device to the service access management node based on a preset triggering event.

13. The method of claim 12, wherein transmitting the access state report of the access network provided by the access device to the service access management node based

on the preset triggering event comprises:

when the network state information characterized in the access state report and a pre-configured threshold satisfy a preset judgment condition, transmitting the access state report of the access network provided by the access device to the service access management node; or,

when the network state information characterized in the access state report and a pre-configured threshold satisfy a preset judgment condition, transmitting the access state report of the access network provided by the access device to the service access management node according to the preset periodic interval until the judgment condition is not satisfied; or,

when the network state information characterized in the access state report and a pre-configured threshold satisfy a preset judgment condition, transmitting the access state report of the access network provided by the access device to the service access management node according to the preset periodic interval until timeout of a set timing period; or,

when the network state information characterized in the access state report and a pre-configured threshold satisfy a preset judgment condition, transmitting the access state report of the access network provided by the access device to the service access management node according to a predefined number of transmission times.

14. An access device, comprising: a second transmission portion, configured to transmit an access state report of an access network provided by the access device to a service access management node, wherein the access state report comprises at least one piece of network state information for characterizing a network state of the access network provided by the access device, and is used for the service access management node to determine a distributed data amount corresponding to the access device according to a data stream to be transmitted.

15. The access device of claim 14, wherein when the access network provided by the access device is an access network supporting a non-3rd generation partnership project (3GPP) specification, wherein the access state report comprises at least one piece of the following network state information: basic service set (BSS) load information, wide area network (WAN) metrics information, a utilization rate of an

available channel, a data amount to be transmitted, or a number of accessed user equipments (UEs).

16. The access device of claim 14, wherein when the access network provided by the access device is an access network supporting a 3GPP specification, the access state report comprises at least one piece of the following network state information: load information of the access network, a number of accessed UEs of the access network, a data amount to be transmitted presently cached by the access network, a present resource utilization rate of the access network, a user throughput of the access network within a preset time period, or information about a data packet that is not transmitted correctly by the access network.

17. The access device of claim 16, wherein the information about the data packet that is not transmitted correctly by the access network comprises at least one of:

a sequence number of a data packet that has been transmitted but not transmitted successfully by the access network;

a minimum sequence number among sequence numbers of data packets to be transmitted by the access network; or

a proportion of a number of data packets that are transmitted wrongly by the access network to a total number of data packets that are transmitted by the access network within the preset time period.

18. The access device of claim 14, further comprising a second receiving portion, configured to receive a request message for the access state report from the service access management node.

19. The access device of claim 14, wherein the second transmission portion is configured to transmit the access state report of the access network provided by the access device to the service access management node according to a preset periodic interval.

20. The access device of claim 14, wherein the second transmission portion is configured to transmit the access state report of the access network provided by the

access device to the service access management node based on a preset triggering event.

5