CLAIMS

1. A wireless communication method for managing communications between a first wireless communication device and a second wireless communication device, comprising:

receiving, by the second wireless communication device from the first wireless communication device, Quality of Service (QoS) related information, wherein the QoS related information is received by the first wireless communication device from a network;

receiving, by the second wireless communication device from the network, at least one configuration.

2. The wireless communication method of claim 1, wherein the QoS-related information comprises at least one of:

QoS information;

at least one Radio Link Control (RLC) channel for which the QoS information applies; or

at least one Radio Bearer (RB) for which the QoS information applies.

3. The wireless communication method of claim 2, wherein the QoS information comprises at least one of a QoS Flow Identifier (QFI), a Protocol Data Unit (PDU) session identifier (ID), a PC5 QFI, a Uu QFI, a QoS profile, a Uu QoS profile, or a PC5 QoS profile.

4. The wireless communication method of claim 2, wherein each of the at least one RLC channel is identified by at least one of a channel identifier (ID) or a channel index.

5. The wireless communication method of claim 1, wherein the least one configuration comprises at least one of:

a first configuration comprising a mapping of at least one QoS Flow Identifier (QFI) to at least one Radio Bearer (RB); or

a second configuration comprising a mapping of the at least one RB to at least one Radio Link Control (RLC) channel.

6. The wireless communication method of claim 5, wherein

the QoS related information received from the first wireless communication device comprises a QFI that is the same as one of the at least one QFI in the first configuration; and

the wireless communication method further comprises determining, by the second wireless communication device, an RLC channel associated with each RB of the second wireless communication device based on the first configuration, the second configuration, and the QoS related information.

7. The wireless communication method of claim 5, further comprising sending, by the second wireless communication device to the network, at least one of an RLC mode, the QoS information, or a channel ID of the at least one RLC channel.

8. The wireless communication method of claim 1, wherein

the QoS-related information comprises a first Radio Link Control (RLC) channel identifier (ID);

the at least one configuration comprises a second RLC channel ID;

the first RLC channel ID and the second RLC channel ID identify a same RLC channel; and

the first wireless communication device identifies the RLC channel in a first signaling and a second signaling for a same RLC channel configuration.

9. The wireless communication method of claim 1, further comprising reporting, by the second wireless communication device to the network, a Radio Link Control (RLC) mode identified by at least one of an RLC channel identifier (ID) received from a first signaling, an RLC channel ID received from a second signaling, or an RLC mode.

10. A wireless communication method for managing communications between a first wireless communication device and a second wireless communication device, comprising:

sending, by the first wireless communication device to the second wireless communication device, Quality of Service (QoS) related information, wherein the QoS related information is received by the first wireless communication device from a network,

wherein the second wireless communication device receives from the network at least one configuration.

11. A first wireless communication device, comprising:
at least one processor configured to:

send, via a transmitter to the second wireless communication device, Quality of Service (QoS) related information, wherein the QoS related information is received by the first wireless communication device from a network,

wherein the second wireless communication device receives from the network at least one configuration.

12. A second wireless communication device, comprising:
at least one processor configured to:

receive, via a receiver from the first wireless communication device, Quality of Service (QoS) related information, wherein the QoS related information is received by the first wireless communication device from a network;

receiving, via the receiver from the network, at least one configuration.

13. The second wireless communication device of claim 12, wherein the QoS-related information comprises at least one of:

QoS information;

at least one Radio Link Control (RLC) channel for which the QoS information applies; or

at least one Radio Bearer (RB) for which the QoS information applies.

14. The second wireless communication device of claim 13, wherein the QoS information comprises at least one of a QoS Flow Identifier (QFI), a Protocol Data Unit (PDU) session identifier (ID), a PC5 QFI, a Uu QFI, a QoS profile, a Uu QoS profile, or a PC5 QoS profile.

15. The second wireless communication device of claim 13, wherein each of the at least one RLC channel is identified by at least one of a channel identifier (ID) or a channel index.

16. The second wireless communication device of claim 12, wherein the least one configuration comprises at least one of:

a first configuration comprising a mapping of at least one QoS Flow Identifier (QFI) to at least one Radio Bearer (RB); or

a second configuration comprising a mapping of the at least one RB to at least one Radio Link Control (RLC) channel.

17. The second wireless communication device of claim 16, wherein

the QoS related information received from the first wireless communication device comprises a QFI that is the same as one of the at least one QFI in the first configuration; and

the wireless communication method further comprises determining, by the second wireless communication device, an RLC channel associated with each RB of the second wireless communication device based on the first configuration, the second configuration, and the QoS related information.

18. The second wireless communication device of claim 16, wherein the at least one processor is configured to send, via a transmitter to the network, at least one of an RLC mode, the QoS information, or a channel ID of the at least one RLC channel.

19. The second wireless communication device of claim 12, wherein

the QoS-related information comprises a first Radio Link Control (RLC) channel identifier (ID);

the at least one configuration comprises a second RLC channel ID;

the first RLC channel ID and the second RLC channel ID identify a same RLC channel; and

the first wireless communication device identifies the RLC channel in a first signaling and a second signaling for a same RLC channel configuration.

20. The second wireless communication device of claim 12, wherein the at least one processor is configured to report, via a transmitter to the network, a Radio Link Control (RLC) mode

identified by at least one of an RLC channel identifier (ID) received from a first signaling, an RLC channel ID received from a second signaling, or an RLC mode.