CLAIMS

1. A network function for wireless communication, comprising:

at least one memory; and

at least one processor coupled with the at least one memory and configured to cause the network function to:

receive a quality of service (QoS) flow indicator (QFI) with protocol data unit (PDU) set QoS parameters; and

bind a QoS flow identified by the QFI to a first Internet Protocol Security (IPsec) Child Security Association (SA).

2. The network function of claim 1, wherein the QoS flow identified by the QFI is the only QoS flow bound to the IPsec Child SA.

3. The network function of claim 1, wherein the at least one processor is further configured to cause the network function to:

determine a mapping list of at least one PDU set importance (PSI) value for the QoS flow and a transport layer marking (TLM) value associated with the first IPsec Child SA.

4. The network function of claim 3, wherein the TLM value comprises a differentiated services code point (DSCP) value.

5. The network function of claim 3, wherein the mapping list includes a mapping of one PSI value to one TLM value.

6. The network function of claim 3, wherein the mapping list includes a mapping of multiple PSI values to one TLM value.

7. The network function of claim 1, wherein the PDU set QoS parameters include a PDU set delay budget (PSDB), a PDU set error rate (PDER), and PDU set integrated handling information (PSIHI).

8. The network function of claim 1, wherein the at least one processor is further configured to cause the network function to receive the QFI with PDU set QoS parameters via a PDU session establishment procedure or a PDU session modification procedure.

9. The network function of claim 1, wherein the network function is a Non-3GPP InterWorking Function (N3IWF).

10. A network function for wireless communication, comprising:

at least one memory; and

at least one processor coupled with the at least one memory and configured to cause the network function to:

transmit a quality of service (QoS) flow indicator (QFI) with protocol data unit (PDU) set QoS parameters.

11. The network function of claim 10, wherein the PDU set QoS parameters include a PDU set delay budget (PSDB), a PDU set error rate (PDER), and PDU set integrated handling information (PSIHI).

12. The network function of claim 10, wherein the network function is a session management function (SMF), and wherein the at least one processor is configured to cause the network function to transmit the QFI with PDU set QoS parameters to a Non-3GPP InterWorking Function (N3IWF) via a PDU session establishment procedure or a PDU session modification procedure.

13. A user equipment (UE) for wireless communication, comprising:

at least one memory; and

at least one processor coupled with the at least one memory and configured to cause the UE to:

receive a mapping list of at least one PDU set importance (PSI) value for a quality of service (QoS) flow; and

receive a transport layer marking (TLM) value associated with an Internet Protocol Security (IPsec) Child Security Association (SA) to which the QoS flow is bound.

14. The UE of claim 13, wherein the TLM value comprises a differentiated services code point (DSCP) value.

15. The UE of claim 13, wherein the mapping list includes a mapping of the at least one PDU PSI value and the TLM value.

16. The UE of claim 13, wherein the mapping list includes a mapping of one PSI value to one TLM value.

17. The UE of claim 13, wherein the mapping list includes a mapping of multiple PSI values to one TLM value.

18. A method performed by a network function, the method comprising:

receiving a quality of service (QoS) flow indicator (QFI) with protocol data unit (PDU) set QoS parameters; and

binding a QoS flow identified by the QFI to a first Internet Protocol Security (IPsec) Child Security Association (SA).

19. The method of claim 18, further comprising:

determining a mapping list of at least one PDU set importance (PSI) value for the QoS flow;

determining a transport layer marking (TLM) value associated with the first IPsec Child SA; and

transmitting the mapping list and the TLM value to a user equipment (UE).

20. The method of claim 18, wherein the PDU set QoS parameters include a PDU set delay budget (PSDB), a PDU set error rate (PDER), and PDU set integrated handling information (PSIHI).