CLAIMS

What is claimed is:

1. An authorization and policy parameter configuration method, applied to a terminal, wherein the method comprises:

sending terminal-to-terminal relay communication capability information and/or a terminal policy container to a first network function; and

receiving an authorization and policy parameter for relay communication sent by a second network function, wherein the authorization and policy parameter for relay communication is generated based on the relay communication capability information and/or the terminal policy container,

wherein the sending a terminal policy container to a first network function comprises:

when a trigger condition is satisfied, sending a policy configuration request message to the first network function, wherein the policy configuration request message carries the terminal policy container; and

the terminal policy container carries terminal-to-terminal relay communication policy or parameter indication information.

2. The authorization and policy parameter configuration method according to claim 1, wherein the sending terminal-to-terminal relay communication capability information to a first network function comprises:

sending a registration request message to the first network function, wherein the registration request message carries the relay communication capability information, and the relay communication capability information comprises: capability information indicating that the terminal is capable of serving as a relay terminal, and/or capability information indicating that the terminal is capable of performing relay communication.

3. The authorization and policy parameter configuration method according to claim 2, wherein the registration request message further carries the terminal policy container; and

the terminal policy container carries terminal-to-terminal relay communication policy or parameter indication information.

4. The authorization and policy parameter configuration method according to claim 1, wherein the trigger condition comprises at least one of the following:

an authorization and policy parameter timer for the terminal-to-terminal relay communication of the terminal expires; or

an authorization and policy parameter for the terminal-to-terminal relay communication of the terminal is invalid.

5. The authorization and policy parameter configuration method according to claim 1, wherein when the terminal is a relay terminal, the authorization and policy parameter for relay communication comprises at least one of the following:

an authorization policy for serving as a terminal-to-terminal relay;

a terminal-to-terminal relay discovery policy or parameter;

a terminal-to-terminal relay communication policy or parameter; or

a security parameter in the terminal-to-terminal relay communication, or

wherein when the terminal is a non-relay terminal, the authorization and policy parameter for relay communication comprises at least one of the following:

an authorization policy for enabling terminal-to-terminal relay communication;

a terminal-to-terminal relay discovery policy or parameter;

a terminal-to-terminal relay communication policy or parameter;

a selection policy for a relay terminal in the terminal-to-terminal relay communication; or

a security parameter in the terminal-to-terminal relay communication.

6. An authorization and policy parameter configuration method, applied to a first network function, wherein the method comprises:

receiving terminal-to-terminal relay communication capability information and/or a terminal policy container; and

sending the relay communication capability information and/or the terminal policy container to a second network function, to enable the second network function to generate an authorization and policy parameter for relay communication based on the relay communication capability information and/or the terminal policy container,

wherein the receiving the terminal policy container comprises:

receiving a policy configuration request message from a terminal, wherein the policy configuration request message carries the terminal policy container; and

the terminal policy container carries terminal-to-terminal relay communication policy or parameter indication information.

7. The authorization and policy parameter configuration method according to claim 6, wherein the receiving terminal-to-terminal relay communication capability information and/or a terminal policy container comprises:

receiving a registration request message from the terminal, wherein the registration request message carries the relay communication capability information, and the relay communication capability information comprises: capability information indicating that the terminal is capable of serving as a relay terminal, and/or capability information indicating that the terminal is capable of performing relay communication.

8. The authorization and policy parameter configuration method according to claim 7, wherein the registration request message further carries the terminal policy container; and

the terminal policy container carries terminal-to-terminal relay communication policy or parameter indication information.

9. The authorization and policy parameter configuration method according to claim 7 or 8, wherein after the receiving a registration request message from a terminal, the method further comprises:

determining, based on subscription information of the terminal, whether the terminal authorizes terminal-to-terminal relay communication; and

storing the relay communication capability information and the subscription information when the authorization is successful.

10. The authorization and policy parameter configuration method according to claim 9, wherein when the terminal is a relay terminal, the method further comprises:

determining, based on the subscription information, whether the terminal is authorized to be a relay terminal; and

the storing the relay communication capability information and the subscription information when the authorization is successful comprises:

storing the relay communication capability information and the subscription information when the terminal authorizes terminal-to-terminal relay communication, and the terminal is authorized to be a relay terminal.

11. The authorization and policy parameter configuration method according to claim 6, wherein the sending the relay communication capability information to a second network function comprises:

sending the relay communication capability information to the second network function in an access and mobility management policy association establishment or update process.

12. The authorization and policy parameter configuration method according to claim 6, wherein the sending the relay communication capability information and the terminal policy container to a second network function comprises:

sending the relay communication capability information and the terminal policy container to the second network function in an access and mobility management policy association establishment or update process.

13. The authorization and policy parameter configuration method according to claim 6, wherein the sending the terminal policy container to a second network function comprises:

sending a terminal policy control update request to the second network function, wherein the terminal policy control update request comprises the terminal policy container.

14. An authorization and policy parameter configuration method, applied to a second network function, wherein the method comprises:

receiving relay communication capability information and/or a terminal policy container from a first network function, wherein the relay communication capability information and/or the terminal policy container is transmitted by a terminal to the first network function;

generating an authorization and policy parameter for relay communication; and

sending the authorization and policy parameter for relay communication to the terminal through a terminal configuration update process.

15. The authorization and policy parameter configuration method according to claim 14, wherein the receiving relay communication capability information from a terminal comprises:

receiving the relay communication capability information in an access and mobility management policy association establishment or update process; or

wherein the receiving relay communication capability information and a terminal policy container from a terminal comprises:

receiving the relay communication capability information and the terminal policy container in an access and mobility management policy association establishment or update process; or

wherein the relay communication capability information comprises:

capability information indicating that the terminal is capable of serving as a relay terminal; and/or the capability information indicating that the terminal is capable of performing relay communication; or

wherein the receiving a terminal policy container comprises:

receiving a terminal policy control update request, wherein the terminal policy control update request comprises the terminal policy container; and

the terminal policy container carries terminal-to-terminal relay communication policy or parameter indication information.

16. The authorization and policy parameter configuration method according to claim 14, wherein when the terminal is a relay terminal, the authorization and policy parameter for relay communication comprises at least one of the following:

an authorization policy for serving as a terminal-to-terminal relay;

a terminal-to-terminal relay discovery policy or parameter;

a terminal-to-terminal relay communication policy or parameter; or

a security parameter in the terminal-to-terminal relay communication, or

wherein when the terminal is a non-relay terminal, the authorization and policy parameter for relay communication comprises at least one of the following:

an authorization policy for enabling terminal-to-terminal relay communication;

a terminal-to-terminal relay discovery policy or parameter;

a terminal-to-terminal relay communication policy or parameter;

a selection policy for a relay terminal in the terminal-to-terminal relay communication; or

a security parameter in the terminal-to-terminal relay communication.

17. A terminal, comprising: a memory, a processor, and a computer program stored on the memory and executable on the processor, wherein when the computer program is executed by the processor, the steps of the authorization and policy parameter configuration method according to any one of claims 1 to 5 are implemented.

18. A network function, comprising: a memory, a processor, and a computer program stored on the memory and executable on the processor, wherein when the computer program is executed by the processor, the steps of the authorization and policy parameter configuration method according to any one of claims 6 to 13 are implemented, or the steps of the authorization and policy parameter configuration method according to any one of claims 14 to 16 are implemented.

19. A computer-readable storage medium having a computer program stored thereon, wherein when the computer program is executed by a processor, the steps of the authorization and policy parameter configuration method according to any one of claims 1 to 5 are implemented, or the steps of the authorization and policy parameter configuration method according to any one of claims 6 to 16 are implemented.