

WHAT IS CLAIMED IS:

1. A resource determination method, executed by a first terminal in a sidelink (SL) communication, comprising:

determining whether the first terminal is a target terminal for a shared channel occupancy time (COT), in response to receiving shared COT indication information transmitted by an initiating terminal for the shared COT; and

determining a transmission resource for performing an SL transmission based on the shared COT indication information, in response to determining that the first terminal is the target terminal for the shared COT.

2. The method according to claim 1, wherein the determining the transmission resource for performing the SL transmission based on the shared COT indication information comprises:

determining the transmission resource for performing the SL transmission based on the shared COT indication information, in response to the first terminal triggering a resource selection or a resource reselection.

3. The method according to claim 1, wherein the shared COT indication information indicates at least one of:

a starting symbol, a starting slot, a starting subframe, or a starting frame of the shared COT;

an ending symbol, an ending slot, an ending subframe, or an ending frame of the shared COT;

a duration of the shared COT;

a starting symbol, a starting slot, a starting subframe, or a starting frame of a remaining COT of the shared COT;

an ending symbol, an ending slot, an ending subframe, or an ending frame of a remaining COT of the shared COT;

a remaining duration of the shared COT;

identification information of the initiating terminal for the shared COT;

identification information of the target terminal for the shared COT; or

channel access priority class (CAPC) information of the shared COT.

4. The method according to claim 1, wherein the determining whether the first terminal is the target terminal for the shared COT comprises:

determining whether the first terminal is the target terminal for the shared COT based on a destination address and a service type of a data packet carrying the shared COT indication information, wherein the service type is a service type indicated by a sidelink control information (SCI) carrying the shared COT indication information.

5. The method according to claim 4, wherein the determining whether the first terminal is the target terminal for the shared COT based on the destination address and the service type of the data packet carrying the shared COT indication information comprises at least one of:

determining that the first terminal is the target terminal for the shared COT, in response to that the service type is a unicast service, and the destination address indicated by the sidelink control information (SCI) carrying the shared COT indication information is a Layer-2 address of the first terminal;

determining that the first terminal is the target terminal for the shared COT, in response to that the service type is a multicast service, the destination address indicated by the SCI carrying the shared COT indication information is a Layer-2 address associated with the multicast service, and an identifier of the target terminal indicated by the shared COT indication information is the same as a terminal identifier of the first terminal; or

determining that the first terminal is the target terminal for the shared COT, in response to that the service type is a broadcast service, the destination address indicated by the SCI carrying the shared COT indication information is a Layer-2 address associated with the broadcast service, and an identifier of the target terminal indicated by the shared COT indication information is the same as a terminal identifier of the first terminal.

6. The method according to claim 1, wherein the determining the transmission resource for performing the SL transmission based on the shared COT indication information comprises:

determining the transmission resource from candidate resources provided by a physical layer based on time-domain information indicated by the shared COT indication information,

wherein the transmission resource comprises a time-domain resource and a frequency-domain resource.

7. The method according to claim 6, wherein the determining the transmission resource from the candidate resources provided by the physical layer based on the time-domain information indicated by the shared COT indication information comprises:

determining the transmission resource from the candidate resources provided by the physical layer based on the time-domain information indicated by the shared COT indication information, in response to the first terminal being configured with a full sensing or partial sensing capability in a higher layer.

8. The method according to claim 6, wherein the determining the transmission resource from the candidate resources provided by the physical layer based on the time-domain information indicated by the shared COT indication information comprises:

determining the transmission resource from the candidate resources provided by the physical layer based on the time-domain information indicated by the shared COT indication information, and at least one of an activation time of a target transmitting terminal, a number of selected frequency resources, or a remaining packet delay budget (PDB) of to-be-transmitted data of a logical channel transmittable on a carrier, wherein the time-domain resource indicated by the transmission resource is within a time-domain range indicated by the shared COT indication information.

9. The method according to claim 6, further comprising:

randomly selecting the transmission resource from the candidate resources provided by the physical layer based on a number of selected frequency resources, and/or a PDB of to-be-transmitted data of a logical channel transmittable on a carrier, in response to failing to determine the transmission resource from the candidate resources provided by the physical layer based on at least one of the number of the selected frequency resources or the PDB of to-be-transmitted data of the logical channel transmittable on the carrier, and the time-domain information indicated by the shared COT indication information.

10. The method according to claim 8 or 9, wherein the target transmitting terminal is the initiating terminal for the shared COT.

11. A first terminal, comprising:

a processor; and

a memory storing instructions executable by the processor, wherein the processor is configured to: determine whether a first terminal is a target terminal or a responding terminal of a shared channel occupancy time (COT), in response to receiving shared COT indication information transmitted by an initiating terminal for the shared COT; and determine a transmission resource for performing an SL transmission based on the shared COT indication information, in response to determining that the first terminal is the target terminal or the responding terminal for the shared COT.

12. A non-transitory computer storage medium, configured to store computer-executable instructions that, when executed by a processor of a first terminal, cause the first terminal to perform a resource determination method, the method comprising:

determining whether the first terminal is a target terminal for a shared channel occupancy time (COT), in response to receiving shared COT indication information transmitted by an initiating terminal for the shared COT; and

determining a transmission resource for performing an SL transmission based on the shared COT indication information, in response to determining that the first terminal is the target terminal for the shared COT.

13. The first terminal according to claim 11, wherein the processor is further configured to:

determine the transmission resource for performing the SL transmission based on the shared COT indication information, in response to the first terminal triggering a resource selection or a resource reselection.

14. The first terminal according to claim 11, wherein the shared COT indication information indicates at least one of:

a starting symbol, a starting slot, a starting subframe, or a starting frame of the shared COT;

an ending symbol, an ending slot, an ending subframe, or an ending frame of the shared COT;

a duration of the shared COT;

a starting symbol, a starting slot, a starting subframe, or a starting frame of a remaining COT of the shared COT;

an ending symbol, an ending slot, an ending subframe, or an ending frame of a remaining COT of the shared COT;

a remaining duration of the shared COT;

identification information of the initiating terminal for the shared COT;

identification information of the target terminal for the shared COT; or

channel access priority class (CAPC) information of the shared COT.

15. The first terminal according to claim 11, wherein the processor is further configured to:

determine whether the first terminal is the target terminal for the shared COT based on a destination address and a service type of a data packet carrying the shared COT indication information, wherein the service type is a service type indicated by a sidelink control information (SCI) carrying the shared COT indication information,

wherein the processor is further configured to perform at least one of:

determining that the first terminal is the target terminal for the shared COT, in response to that the service type is a unicast service, and the destination address indicated by the sidelink control information (SCI) carrying the shared COT indication information is a Layer-2 address of the first terminal;

determining that the first terminal is the target terminal for the shared COT, in response to that the service type is a multicast service, the destination address indicated by the SCI carrying the shared COT indication information is a Layer-2 address associated with the multicast service, and an identifier of the target terminal indicated by the shared COT indication information is the same as a terminal identifier of the first terminal; or

determining that the first terminal is the target terminal for the shared COT, in response to

that the service type is a broadcast service, the destination address indicated by the SCI carrying the shared COT indication information is a Layer-2 address associated with the broadcast service, and an identifier of the target terminal indicated by the shared COT indication information is the same as a terminal identifier of the first terminal.

16. The first terminal according to claim 11, wherein the processor is further configured to:

determine the transmission resource from candidate resources provided by a physical layer based on time-domain information indicated by the shared COT indication information, wherein the transmission resource comprises a time-domain resource and a frequency-domain resource.

17. The first terminal according to claim 16, wherein the processor is further configured to:

determine the transmission resource from the candidate resources provided by the physical layer based on the time-domain information indicated by the shared COT indication information, in response to the first terminal being configured with a full sensing or partial sensing capability in a higher layer.

18. The first terminal according to claim 16, wherein the processor is further configured to:

determine the transmission resource from the candidate resources provided by the physical layer based on the time-domain information indicated by the shared COT indication information, and at least one of an activation time of a target transmitting terminal, a number of selected frequency resources, or a remaining packet delay budget (PDB) of to-be-transmitted data of a logical channel transmittable on a carrier, wherein the time-domain resource indicated by the transmission resource is within a time-domain range indicated by the shared COT indication information, wherein the target transmitting terminal is the initiating terminal for the shared COT.

19. The first terminal according to claim 16, wherein the processor is further configured

to:

randomly select the transmission resource from the candidate resources provided by the physical layer based on at least one of a number of selected frequency resources or a PDB of to-be-transmitted data of a logical channel transmittable on a carrier, in response to failing to determine the transmission resource from the candidate resources provided by the physical layer based on at least one of the number of the selected frequency resources or the PDB of to-be-transmitted data of the logical channel transmittable on the carrier, and the time-domain information indicated by the shared COT indication information.

20. A system, comprising:

a first terminal for performing the resource determination method according to any one of claims 1 to 10; and

a base station.