Claims

1. A method for sidelink communication, applicable to a first terminal, wherein the first terminal performs the sidelink communication using an unlicensed spectrum, and the method comprises:

performing (902) sidelink transmission in a first time-domain unit in response to a transmission condition being satisfied, wherein the transmission condition comprises the following items:

the first terminal is provided with granted transmission resources in the first time-domain unit, and

channel access performed by the first terminal before the first time-domain unit is successful;

wherein in a case that the first time-domain unit is within channel occupancy time initiated by a third terminal, the transmission condition further comprises that the third terminal is a destination receiver of sidelink data for transmission by the first terminal; and

in a case that the transmission condition is met, a destination identifier of sidelink control information (SCI) transmitted in the sidelink transmission is determined based on a service type in a case that the first terminal performs the sidelink transmission in a broadcast mode, wherein a service corresponding to the service type is a service to be received by the third terminal.

2. The method according to claim 1, wherein the granted transmission resources comprise at least one of:

transmission resources allocated by a network device to the first terminal; or

transmission resources autonomously selected by the first terminal.

3. The method according to claim 1, wherein types of the channel access comprise at least one of: Type 1 channel access, Type 2A channel access, Type 2B channel access, or Type 2C channel access.

4. The method according to claim 3, further comprising:

performing the Type 2A channel access or the Type 2B channel access before the first time-domain unit in a case that the first time-domain unit is within channel occupancy time initiated by the third terminal; and

performing the Type 1 channel access before the first time-domain unit in a case that the first time-domain unit is not within the channel occupancy time initiated by the third terminal.

5. The method according to claim 1, wherein a duration for performing the sidelink transmission in the first time-domain unit by the first terminal is not greater than a first duration in a case that the channel access is Type 2C channel access.

6. The method according to claim 1, wherein the channel access being successful comprises:

channel access immediately before the sidelink transmission in the first time-domain unit is successful.

7. The method according to any one of claims 1 to 6, wherein in a case that the transmission condition is met:

a destination identifier of SCI transmitted in the sidelink transmission is determined based on identification information of the third terminal in a case that the first terminal performs the sidelink transmission in a unicast mode; or

a destination identifier of SCI transmitted in the sidelink transmission is determined based on group identification information in a case that the first terminal performs the sidelink transmission in a groupcast mode, wherein the group identification information indicates a communication group comprising the first terminal and the third terminal.

8. An apparatus for sidelink communication, comprising:

a sidelink transmission module (1320), configured to perform sidelink transmission in a first time-domain unit in response to a transmission condition being satisfied, wherein the transmission condition comprises the following items:

the apparatus is provided with granted transmission resources in the first time-domain unit, and

channel access performed by the apparatus before the first time-domain unit is successful;

wherein in a case that the first time-domain unit is within channel occupancy time initiated by a third terminal, the transmission condition further comprises that the third terminal is a destination receiver of sidelink data for transmission by the apparatus; and

in a case that the transmission condition is met, a destination identifier of sidelink control information (SCI) transmitted in the sidelink transmission is determined based on a service type in a case that the apparatus performs the sidelink transmission in a broadcast mode, wherein a service corresponding to the service type is a service to be received by the third terminal.

9. The apparatus according to claim 8, wherein the granted transmission resources comprise at least one of:

transmission resources allocated by a network device to the apparatus; or

transmission resources autonomously selected by the apparatus.

10. The apparatus according to claim 8, wherein types of the channel access comprise at least one of: Type 1 channel access, Type 2A channel access, Type 2B channel access, or Type 2C channel access.

11. The apparatus according to claim 10, further comprising:

a sensing module, configured to: perform the Type 2A channel access or the Type 2B channel access before the first time-domain unit in a case that the first time-domain unit is within channel occupancy time initiated by the third terminal; and perform the Type 1 channel access before the first time-domain unit in a case that the first time-domain unit is not within the channel occupancy time initiated by the third terminal.

12. The apparatus according to claim 8, wherein the sidelink transmission module (1320) is further configured to cause a duration for performing the sidelink transmission in the first time-domain unit to be not greater than a first duration in a case that the channel access is Type 2C channel access.

13. The apparatus according to claim 8, wherein the channel access being successful comprises: channel access immediately before the sidelink transmission in the first time-domain unit is successful.

14. The apparatus according to any one of claims 8 to 13, wherein in a case that the transmission condition is satisfied:

a destination identifier of SCI transmitted in the sidelink transmission is determined based on identification information of the third terminal in a case that the apparatus performs the sidelink transmission in a unicast mode; or

a destination identifier of SCI transmitted in the sidelink transmission is determined based on group identification information in a case that the apparatus performs the sidelink transmission in a groupcast mode, wherein the group identification information indicates a communication group comprising the apparatus and the third terminal.

15. A computer-readable storage medium, storing one or more programs, wherein the one or more programs, when loaded and run by a processor (1401), cause the processor (1401) to perform the method for sidelink communication as defined in any one of claims 1 to 7.