CLAIMS

What is claimed is:

1. A resource determining method, comprising:

receiving, by a first terminal apparatus, first indication information from a second terminal apparatus, wherein the first indication information indicates the first terminal apparatus to determine a first resource for the second terminal apparatus;

determining, by the first terminal apparatus, the first resource for the second terminal apparatus based on the first indication information; and

indicating, by the first terminal apparatus, the first resource to the second terminal apparatus, wherein the first resource is used by the second terminal apparatus to send data.

2. The method according to claim 1, wherein the determining, by the first terminal apparatus, the first resource for the second terminal apparatus comprises:

determining, by the first terminal apparatus, the first resource for the second terminal apparatus based on first information, wherein the first information comprises a maximum value of a quantity of second terminal apparatuses that are allowed to communicate with the first terminal apparatus; a maximum value of a quantity of second terminal apparatuses for which the first terminal apparatus allows to determine the first resource; and/or a maximum capability value of determining the first resource by the first terminal apparatus.

3. The method according to claim 2, wherein

the maximum value and/or the maximum capability value are/is determined based on second information, the second information comprises the maximum value and/or the maximum capability value, and the second information comprises radio resource control (RRC) signaling;

the maximum value and/or the maximum capability value are/is predefined; or

the maximum value and/or the maximum capability value are/is determined based on capability information of the first terminal apparatus.

4. The method according to ~~any one of~~ claim~~s~~ 1~~ to 3~~, wherein the method further comprises:

receiving, by the first terminal apparatus, third information from the second terminal apparatus, wherein the third information comprises at least one of the following: time of to-be-sent data of the second terminal apparatus, a size of the data, a time-frequency resource required by the data, a measurement result of a channel busy rate (CBR) or a channel occupancy rate (CR)

of the second terminal apparatus, or a quality of service (QoS) requirement of the data; and

determining, by the first terminal apparatus, the first resource for the second terminal apparatus based on the third information.

5. The method according to ~~any one of~~ claim~~s~~ 1~~ to 4~~, wherein the indicating, by the first terminal apparatus, the first resource to the second terminal apparatus comprises:

sending, by the first terminal apparatus, fourth information to the second terminal apparatus, wherein the fourth information comprises the first resource and second indication information, and the second indication information indicates that the first resource is the first resource determined by the first terminal apparatus for the second terminal apparatus.

~~6. The method according to claim 5, wherein~~

~~the fourth information is sidelink control information SCI signaling, media access control control element MAC CE signaling, or radio resource control RRC signaling.~~

~~7. The method according to any one of claims 1 to 6, wherein the method further comprises:~~

~~determining, by the first terminal apparatus based on a priority of to-be-sent data of the first terminal apparatus or a priority of the to-be-sent data of the second terminal apparatus, priority information corresponding to the first resource, wherein the first terminal apparatus and/or the second terminal apparatus send/sends data by using the first resource based on a priority indicated by the priority information; and~~

~~sending, by the first terminal apparatus, the priority information to the second terminal apparatus.~~

~~8. The method according to claim 7, wherein~~

~~the priority information is the priority of the to-be-sent data of the first terminal apparatus;~~

~~the priority information is the priority of the to-be-sent data of the second terminal apparatus;~~

~~the priority information is a higher priority between the priority of the to-be-sent data of the first terminal apparatus and the priority of the to-be-sent data of the second terminal apparatus; or~~

~~the priority information is a lower priority between the priority of the to-be-sent data of the first terminal apparatus and the priority of the to-be-sent data of the second terminal apparatus.~~

~~9. The method according to claim 7 or 8, wherein~~

~~a priority of the data is determined based on a packet delay budget PDB of the data, and a smaller PDB of the data indicates a higher priority of the data.~~

~~10. The method according to any one of claims 1 to 9, wherein the method further comprises:~~

determining, by the first terminal apparatus based on a priority of to-be-sent data of at least one second terminal apparatus, a priority of a resource that is used to send the data and that is determined by the at least one second terminal apparatus from the first resource, wherein the second terminal apparatus is the at least one second terminal apparatus.

11. The method according to any one of claims 1 to 10, wherein the method further comprises:

determining, by the first terminal apparatus, the first resource for the second terminal apparatus in a first time period, wherein

the first time period is duration in which the second terminal apparatus sends the data;

the first time period is indicated to the first terminal apparatus by using third indication information, wherein the third indication information comprises the first time period;

end time of the first time period is time at which the first terminal apparatus receives fourth indication information from the second terminal apparatus, wherein the fourth indication information indicates the first terminal apparatus to stop determining the first resource for the second terminal apparatus;

end time of the first time period is first time comprised in fourth indication information received by the first terminal apparatus from the second terminal apparatus, wherein the fourth indication information indicates the first terminal apparatus to stop, at the first time, determining the first resource for the second terminal apparatus;

end time of the first time period is time at which the first terminal apparatus sends fifth indication information to the second terminal apparatus, wherein the fifth indication information indicates the first terminal apparatus to stop determining the first resource for the second terminal apparatus; or

end time of the first time period is second time comprised in fifth indication information sent by the first terminal apparatus to the second terminal apparatus, wherein the fifth indication information indicates the first terminal apparatus to stop, at the second time, determining the first resource for the second terminal apparatus.

12. The method according to claim 11, wherein the determining, by the first terminal apparatus, the first resource for the second terminal apparatus in a first time period comprises:

when the second terminal apparatus periodically sends the data, periodically determining, by the first terminal apparatus based on a period in which the second terminal apparatus sends the data, the first resource for the second terminal apparatus in the first time period; and

~~when the second terminal apparatus aperiodically sends the data, determining, by the first terminal apparatus, the first resource for the second terminal apparatus for one time in the first time period.~~

~~13. The method according to any one of claims 1 to 12, wherein the method further comprises:~~

~~sending, by the first terminal apparatus, fifth information to the second terminal apparatus, wherein the fifth information comprises a first resource determined by the first terminal apparatus for the first terminal apparatus and sixth indication information, and the sixth indication information indicates that the first resource comprised in the fifth information is the first resource determined by the first terminal apparatus for the first terminal apparatus.~~

~~14~~6. A resource determining method, comprising:

sending, by a second terminal apparatus, first indication information to a first terminal apparatus, wherein the first indication information indicates the first terminal apparatus to determine a first resource for the second terminal apparatus; and

receiving, by the second terminal apparatus, the first resource from the first terminal apparatus, wherein the first resource is used by the second terminal apparatus to send data.

~~15~~7. The method according to claim ~~14~~6, wherein the sending, by a second terminal apparatus, first indication information to a first terminal apparatus comprises:

when a first measurement result of the second terminal apparatus is less than a preset threshold, sending, by the second terminal apparatus, the first indication information to the first terminal apparatus, wherein the first measurement result is a result of network quality measured by the second terminal apparatus.

~~16~~8. The method according to claim 6~~14 or 15~~, wherein the method further comprises:

sending, by the second terminal apparatus, third information to the first terminal apparatus, wherein the third information comprises at least one of the following: time of to-be-sent data of the second terminal apparatus, a size of the data, a time-frequency resource required by the data, a measurement result of a channel busy rate (CBR) or a channel occupancy rate (CR) of the second terminal apparatus, or a quality of service (QoS) requirement of the data.

~~17~~9. The method according to ~~any one of~~ claim~~s~~ 6~~14 to 16~~, wherein the receiving, by the second terminal apparatus, the first resource from the first terminal apparatus comprises:

receiving, by the second terminal apparatus, fourth information from the first terminal, wherein the fourth information comprises the first resource and second indication information, and

the second indication information indicates that the first resource is the first resource determined by the first terminal apparatus for the second terminal apparatus.

~~18. The method according to claim 17, wherein~~

~~the fourth information is sidelink control information SCI signaling, media access control control element MAC CE signaling, or radio resource control RRC signaling.~~

~~19. The method according to any one of claims 14 to 18, wherein the method further comprises:~~

~~receiving, by the second terminal apparatus, priority information corresponding to the first resource from the first terminal apparatus, wherein the priority information is determined based on a priority of to-be-sent data of the first terminal apparatus or a priority of the to-be-sent data of the second terminal apparatus, and the first terminal apparatus and/or the second terminal apparatus send/sends data by using the first resource based on a priority indicated by the priority information.~~

~~20. The method according to claim 19, wherein~~

~~the priority information is the priority of the to-be-sent data of the first terminal apparatus;~~

~~the priority information is the priority of the to-be-sent data of the second terminal apparatus;~~

~~the priority information is a higher priority between the priority of the to-be-sent data of the first terminal apparatus and the priority of the to-be-sent data of the second terminal apparatus; or~~

~~the priority information is a lower priority between the priority of the to-be-sent data of the first terminal apparatus and the priority of the to-be-sent data of the second terminal apparatus.~~

~~21. The method according to claim 19 or 20, wherein~~

~~a priority of the data is determined based on a packet delay budget PDB of the data, and a smaller PDB of the data indicates a higher priority of the data.~~

~~22. The method according to any one of claims 14 to 21, wherein the method further comprises:~~

~~receiving, by the second terminal apparatus, the first resource determined by the first terminal apparatus for the second terminal apparatus in a first time period, wherein~~

~~the first time period is duration in which the second terminal apparatus sends the data;~~

~~the first time period is indicated to the first terminal apparatus by using third indication information, wherein the third indication information comprises the first time period;~~

~~end time of the first time period is time at which the first terminal apparatus receives fourth~~

indication information from the second terminal apparatus, wherein the fourth indication information indicates the first terminal apparatus to stop determining the first resource for the second terminal apparatus;

end time of the first time period is first time comprised in fourth indication information received by the first terminal apparatus from the second terminal apparatus, wherein the fourth indication information indicates the first terminal apparatus to stop, at the first time, determining the first resource for the second terminal apparatus;

end time of the first time period is time at which the first terminal apparatus sends fifth indication information to the second terminal apparatus, wherein the fifth indication information indicates the first terminal apparatus to stop determining the first resource for the second terminal apparatus; or

end time of the first time period is second time comprised in fifth indication information sent by the first terminal apparatus to the second terminal apparatus, wherein the fifth indication information indicates the first terminal apparatus to stop, at the second time, determining the first resource for the second terminal apparatus.

23. The method according to claim 22, wherein the receiving, by the second terminal apparatus, the first resource determined by the first terminal apparatus for the second terminal apparatus in a first time period comprises:

when the second terminal apparatus periodically sends the data, periodically receiving, by the second terminal apparatus based on a period in which the second terminal apparatus sends the data, the first resource determined by the first terminal apparatus for the second terminal apparatus in the first time period; and

when the second terminal apparatus aperiodically sends the data, receiving, by the second terminal apparatus, the first resource determined by the first terminal apparatus for the second terminal apparatus for one time in the first time period.

24. The method according to any one of claims 14 to 23, wherein the method further comprises:

receiving, by the second terminal apparatus, fifth information from the first terminal apparatus, wherein the fifth information comprises a first resource determined by the first terminal apparatus for the first terminal apparatus and sixth indication information, and the sixth indication information indicates that the first resource comprised in the fifth information is the first resource

~~determined by the first terminal apparatus for the first terminal apparatus.~~

10. A first terminal apparatus, wherein the apparatus comprises:

a non-transitory memory storage comprising instructions; and

one or more hardware processors in communication with the non-transitory memory storage, wherein the one or more hardware processors execute the instructions to:

receive first indication information from a second terminal apparatus, wherein the first indication information indicates the first terminal apparatus to determine a first resource for the second terminal apparatus;

determine the first resource for the second terminal apparatus based on the first indication information; and

indicate the first resource to the second terminal apparatus, wherein the first resource is used by the second terminal apparatus to send data.

11. The method according to claim 10, wherein the one or more hardware processors execute the instructions to:

determine the first resource for the second terminal apparatus based on first information, wherein the first information comprises a maximum value of a quantity of second terminal apparatuses that are allowed to communicate with the first terminal apparatus; a maximum value of a quantity of second terminal apparatuses for which the first terminal apparatus allows to determine the first resource; and/or a maximum capability value of determining the first resource by the first terminal apparatus.

12. The method according to claim 11, wherein

the maximum value and/or the maximum capability value are/is determined based on second information, the second information comprises the maximum value and/or the maximum capability value, and the second information comprises radio resource control (RRC) signaling;

the maximum value and/or the maximum capability value are/is predefined; or

the maximum value and/or the maximum capability value are/is determined based on capability information of the first terminal apparatus.

13. The method according to claim 10, wherein the one or more hardware processors execute the instructions to:

receive third information from the second terminal apparatus, wherein the third information comprises at least one of the following: time of to-be-sent data of the second terminal apparatus,

a size of the data, a time-frequency resource required by the data, a measurement result of a channel busy rate (CBR) or a channel occupancy rate (CR) of the second terminal apparatus, or a quality of service (QoS) requirement of the data; and

determine the first resource for the second terminal apparatus based on the third information.

14. The method according to claim 10, wherein the one or more hardware processors execute the instructions to:

send fourth information to the second terminal apparatus, wherein the fourth information comprises the first resource and second indication information, and the second indication information indicates that the first resource is the first resource determined by the first terminal apparatus for the second terminal apparatus.

15. A second terminal apparatus, wherein the apparatus comprises:

a non-transitory memory storage comprising instructions; and

one or more hardware processors in communication with the non-transitory memory storage, wherein the one or more hardware processors execute the instructions to:

send first indication information to a first terminal apparatus, wherein the first indication information indicates the first terminal apparatus to determine a first resource for the second terminal apparatus; and

receive the first resource from the first terminal apparatus, wherein the first resource is used by the second terminal apparatus to send data.

16. The method according to claim 15, wherein the one or more hardware processors execute the instructions to:

when a first measurement result of the second terminal apparatus is less than a preset threshold, sending, by the second terminal apparatus, the first indication information to the first terminal apparatus, wherein the first measurement result is a result of network quality measured by the second terminal apparatus.

17. The method according to claim 15, wherein the one or more hardware processors execute the instructions to:

send third information to the first terminal apparatus, wherein the third information comprises at least one of the following: time of to-be-sent data of the second terminal apparatus, a size of the data, a time-frequency resource required by the data, a measurement result of a channel busy rate (CBR) or a channel occupancy rate (CR) of the second terminal apparatus, or a quality of service

(QoS) requirement of the data.

18. The method according to claim 15, wherein the one or more hardware processors execute the instructions to:

receive fourth information from the first terminal, wherein the fourth information comprises the first resource and second indication information, and the second indication information indicates that the first resource is the first resource determined by the first terminal apparatus for the second terminal apparatus.

~~25. A communication apparatus, wherein the communication apparatus comprises one or more processors and a transceiver, and the one or more processors and the transceiver support the communication apparatus in performing the resource determining method according to any one of claims 1 to 13 or performing the resource determining method according to any one of claims 14 to 24.~~

~~26. A computer-readable storage medium, wherein the computer-readable storage medium stores computer instructions or a program, and when the computer instructions or the program are/is run on a computer, the computer is enabled to perform the resource determining method according to any one of claims 1 to 13 or perform the resource determining method according to any one of claims 14 to 24.~~

~~27. A communication system, wherein the communication system comprises a first terminal apparatus and a second terminal apparatus, the first terminal apparatus is configured to receive first indication information from the second terminal apparatus, the first indication information indicates the first terminal apparatus to determine a first resource for the second terminal apparatus, the first terminal apparatus is further configured to determine the first resource for the second terminal apparatus based on the first indication information, the first terminal apparatus is further configured to indicate the first resource to the second terminal apparatus, and the first resource is used by the second terminal apparatus to send data; and~~

~~the second terminal apparatus is configured to send the first indication information to the first terminal apparatus, and the second terminal apparatus is further configured to receive the first resource from the first terminal apparatus.~~