What we claim is:

1. A method for transmitting a reference signal, comprising:

receiving, by a terminal, first information sent by a network device, wherein the first information is used for indicating that a transmission pattern for transmitting a demodulation reference signal (DMRS) to be transmitted is a first transmission pattern or a second transmission pattern; and

performing, by the terminal, transmission of the DMRS to be transmitted with the network device on a transmission resource indicated by the first transmission pattern or the second transmission pattern.

2. The method according to claim 1, wherein a quantity of transmission resources used for transmitting the DMRS to be transmitted in a transmission unit indicated by the first transmission pattern is greater than a quantity of transmission resources used for transmitting the DMRS to be transmitted in a transmission unit indicated by the second transmission pattern.

3. The method according to claim 1 or 2, wherein receiving, by the terminal, the first information sent by the network device comprises:

receiving, by the terminal, the first information sent by the network device, wherein a first field in the first information is used for indicating that the transmission pattern for transmitting the DMRS to be transmitted is the first transmission pattern or the second transmission pattern;

or,

receiving, by the terminal, the first information sent by the network device comprises:

receiving, by the terminal, the first information sent by the network device, wherein the first information indicates whether the transmission pattern for transmitting the DMRS to be transmitted is the first transmission pattern or the second transmission pattern through whether carrying a second field or not.

4. The method according to any one of claims 1-3, wherein the first information is at least one piece of following information: system information, a radio resource control (RRC) signaling, a media access control (MAC) signaling, and downlink control information (DCI), or

the first information is carried in a broadcast message transmitted through a physical layer.

5. A method for transmitting a reference signal, comprising:

sending, by a network device, first information to a terminal, wherein the first information is used for indicating that a transmission pattern for transmitting a demodulation reference

signal (DMRS) to be transmitted is a first transmission pattern or a second transmission pattern; and

sending, by the network device, the DMRS to be transmitted to the terminal on a transmission resource indicated by the first transmission pattern or the second transmission pattern.

6. The method according to claim 5, wherein a quantity of transmission resources for transmitting the DMRS to be transmitted in a transmission unit indicated by the first transmission pattern is greater than a quantity of transmission resources used for transmitting the DMRS to be transmitted in a transmission unit indicated by the second transmission pattern.

7. The method according to claim 5 or 6, wherein sending, by the network device, the first information to the terminal comprises:

sending, by the network device, the first information to the terminal, wherein a first field in the first information is used for indicating that the transmission pattern for transmitting the DMRS to be transmitted is the first transmission pattern or the second transmission pattern;

or,

sending, by the network device, the first information to the terminal comprises:

sending, by the network device, the first information to the terminal, wherein the first information indicates whether the transmission pattern for transmitting the DMRS to be transmitted is the first transmission pattern or the second transmission pattern through whether carrying a second field or not.

8. The method according to any one of claims 5-7, wherein the first information is any one piece of following information: system information, a radio resource control (RRC) signaling, a media access control (MAC) signaling, and downlink control information (DCI), or

the first information is carried in a broadcast message transmitted through a physical layer.

9. A terminal, comprising:

a receiving unit, used for receiving first information sent by a network device, wherein the first information is used for indicating that a transmission pattern for transmitting a demodulation reference signal (DMRS) to be transmitted is a first transmission pattern or a second transmission pattern; and

a transmission unit, used for performing transmission of the DMRS to be transmitted with the network device on a transmission resource indicated by the first transmission pattern or the

second transmission pattern.

10. The terminal according to claim 9, wherein a quantity of transmission resources for transmitting the DMRS to be transmitted in a transmission unit indicated by the first transmission pattern is greater than a quantity of transmission resources used for transmitting the DMRS to be transmitted in a transmission unit indicated by the second transmission pattern.

11. The terminal according to claim 9 or 10, wherein the receiving unit is specifically used for:

receiving the first information sent by the network device, wherein a first field in the first information is used for indicating that the transmission pattern for transmitting the DMRS to be transmitted is the first transmission pattern or the second transmission pattern;

or,

the receiving unit is specifically used for:

receiving the first information sent by the network device, wherein the first information indicates whether the transmission pattern for transmitting the DMRS to be transmitted is the first transmission pattern or the second transmission pattern through whether carrying a second field or not.

12. The terminal according to any one of claims 9-11, wherein the first information is any one piece of following information: system information, a radio resource control (RRC) signaling, a media access control (MAC) signaling, and downlink control information (DCI), or

the first information is carried in a broadcast message transmitted through a physical layer.

13. A network device, comprising:

a sending unit, used for sending first information to a terminal, wherein the first information is used for indicating that a transmission pattern for transmitting a demodulation reference signal (DMRS) to be transmitted is a first transmission pattern or a second transmission pattern; and

a transmission unit, used for transmitting the DMRS to be transmitted to the terminal on a transmission resource indicated by the first transmission pattern or the second transmission pattern.

14. The network device according to claim 13, wherein a quantity of transmission resources for transmitting the DMRS to be transmitted in a transmission unit indicated by the first transmission pattern is greater than a quantity of transmission resources used for

transmitting the DMRS to be transmitted in a transmission unit indicated by the second transmission pattern.

15. The network device according to claim 13 or 14, wherein the sending unit is specifically used for:

sending the first information to the terminal, wherein a first field in the first information is used for indicating that the transmission pattern for transmitting the DMRS to be transmitted is the first transmission pattern or the second transmission pattern;

or,

the sending unit is specifically used for:

sending the first information to the terminal, wherein the first information indicates whether the transmission pattern for transmitting the DMRS to be transmitted is the first transmission pattern or the second transmission pattern through whether carrying a second field or not.

16. The network device according to any one of claims 13-15, wherein the first information is any one piece of following information: system information, a radio resource control (RRC) signaling, a media access control (MAC) signaling, and downlink control information (DCI), or

the first information is carried in a broadcast message transmitted through a physical layer.