What is claimed is:

1. A wireless communication method for an unlicensed spectrum, comprising:

sending, by a first terminal device, first indication information to a network device through a first transmission burst in a channel occupancy time (COT) obtained by the first terminal device, wherein the first indication information indicates the COT obtained by the first terminal device so that the network device performs downlink transmission within a second transmission burst in the COT;

wherein one or more data channels transmitted within the second transmission burst comprise no unicast physical downlink shared channel (PDSCH), and a duration of the second transmission burst is less than or equal to a preset duration.

2. The method according to claim 1, wherein

the second transmission burst is further used for sending at least one piece of the following information:

control information in an initial access procedure, control information in a random access procedure, control information used for mobility management, a paging message, a reference signal, a UE-specific physical downlink control channel (PDCCH), a handover command, a common PDCCH, short message service paging, a synchronization signal block (SSB) and downlink feedback indication information.

3. The method according to claim 1 or 2, wherein the second transmission burst comprises a transmission burst transmitted by the network device to a second terminal device, the first terminal device and the second terminal device have a same quasi co-location (QCL) assumption.

4. The method according to claim 3, wherein the COT further comprises a third transmission burst, wherein the third transmission burst comprises channels transmitted by the first terminal device or the second terminal device to the network device.

5. The method according to any one of claims 1 to 4, wherein the first indication information is further used for indicating at least one piece of the following information:

whether the first terminal device shares a resource in the COT, a channel access scheme of the second transmission burst, a starting location of the second transmission burst, a length of the second transmission burst, an ending location of the second transmission burst, an ending location of the first transmission burst, an ending location or a remaining length of the COT, a QCL relationship between channels or signals transmitted on the first transmission burst, a QCL relationship between channels or signals to be transmitted on the second transmission burst, and a gap between the ending location of the first transmission burst and the starting location of the second transmission burst.

6. The method according to claim 5, wherein the first indication information is used for indicating whether the first terminal device shares a resource in the COT;

wherein the first indication information comprises 1-bit indication information, if the 1-bit indication information indicates 1, the first terminal device shares the resource in the COT; if the 1-bit indication information indicates 0, the first terminal device does not share the resource in the COT.

7. A terminal device for an unlicensed spectrum, comprising:

a communications unit, configured to send first indication information to a network device through a first transmission burst in a channel occupancy time (COT) obtained by the terminal device, wherein the first indication information indicates the COT obtained by the terminal device so that the network device performs downlink transmission within a second transmission burst in the COT;

wherein one or more data channels transmitted within the second transmission burst comprise no unicast physical downlink shared channel (PDSCH), and a duration of the second transmission burst is less than or equal to a preset duration.

8. The terminal device according to claim 7, wherein

the second transmission burst is further used for sending at least one piece of the following information:

control information in an initial access procedure, control information in a random access procedure, control information used for mobility management, a paging message, a

reference signal, a UE-specific physical downlink control channel (PDCCH), a handover command, a common PDCCH, short message service paging, a synchronization signal block, SSB, and downlink feedback indication information.

9. The terminal device according to claim 7 or 8, wherein

the second transmission burst comprises a transmission burst transmitted by the network device to another terminal device, the terminal device and the another terminal device have a same quasi co-location (QCL) assumption.

10. The terminal device according to claim 9, wherein the COT further comprises a third transmission burst, wherein the third transmission burst comprises channels transmitted by the terminal device or the another terminal device to the network device.

11. The terminal device according to any one of claims 7 to 9, wherein the first indication information is used for indicating at least one piece of the following information:

whether the terminal device shares a resource in the COT, a channel access scheme of the second transmission burst, a starting location of the second transmission burst, a length of the second transmission burst, an ending location of the second transmission burst, an ending location of the first transmission burst, an ending location or a remaining length of the COT, a QCL relationship between channels or signals transmitted on the first transmission burst, a QCL relationship between channels or signals to be transmitted on the second transmission burst, and a gap between the ending location of the first transmission burst and the starting location of the second transmission burst.

12. The terminal device according to claim 11, wherein the first indication information is used for indicating whether the terminal device shares a resource in the COT;

wherein the first indication information comprises 1-bit indication information, if the 1-bit indication information indicates 1, the terminal device shares the resource in the COT; if the 1-bit indication information indicates 0, the terminal device does not share the resource in the COT.