

## CLAIMS

1. A resource configuration indication method, comprising:

sending, by a terminal device, time domain resource indication information, wherein the time domain resource indication information is configured to indicate a transmission period and a number of time domain resource units,

wherein the transmission period comprises: a transmission period combination, and the number of time domain resource units is configured to indicate a number  $N_i$  of available time slots in each transmission period, wherein  $N_i = M_i * K_i$ ,  $M_i$  is the number of time domain resource units, a time domain resource unit comprises  $K_i$  time slots, a subcarrier spacing corresponding to the  $K_i$  time slots is  $F$ , and  $K_i$  is a predefined positive integer.

2. The method of claim 1, wherein, when the transmission period combination does not belong to a first transmission period combination set,  $K_i = 1$  and  $F$  is a first value; and

when the transmission period combination belongs to the first transmission period combination set,  $K_i$  is a predefined positive integer greater than 1 and  $F$  is the first value, or,  $K_i = 1$  and  $F$  is a second value,

wherein the first transmission period combination set is an empty set or comprises at least part of following transmission period combinations:

10ms transmission period and 10ms transmission period, 5ms transmission period and 5ms transmission period, 1ms transmission period and 4ms transmission period, 4ms transmission period and 1ms transmission period, 2ms transmission period and 3ms transmission period, 3ms transmission period and 2ms transmission period, 1ms transmission period and 3ms transmission period, 3ms transmission period and 1ms transmission period, and 2ms transmission period and 2ms transmission period.

3. The method of claim 1, wherein, when the transmission period combination does not belong to a first transmission period combination set,  $K_i = 1$  and  $F$  is a first value;

when the transmission period combination belongs to the first transmission period combination set, and a first transmission period and a second transmission period in the

transmission period combination are the same,  $K_i$  is a predefined positive integer greater than 1 and  $F$  is the first value, or,  $K_i=1$  and  $F$  is a second value; and

when the transmission period combination belongs to the first transmission period combination set, and the first transmission period and the second transmission period in the transmission period combination are different,  $K_1$  corresponding to the first transmission period is equal to 1 and  $F$  is the first value,  $K_2$  corresponding to the second transmission period is a predefined positive integer greater than 1 and  $F$  is the first value, or,  $K_2$  corresponding to the second transmission period is equal to 1 and  $F$  is the second value,

wherein the first transmission period combination set is an empty set or comprises at least part of following transmission period combinations:

10ms transmission period and 10ms transmission period, 5ms transmission period and 5ms transmission period, 1ms transmission period and 4ms transmission period, 4ms transmission period and 1ms transmission period, 2ms transmission period and 3ms transmission period, 3ms transmission period and 2ms transmission period, 1ms transmission period and 3ms transmission period, 3ms transmission period and 1ms transmission period, and 2ms transmission period and 2ms transmission period.

4. The method of claim 1, wherein, when a frequency point of a serving cell where the terminal device is located is less than or equal to 6GHz, or a subcarrier spacing  $f$  of a SideLink (SL) Synchronization Signal and PBCH block (SSB) carrying the time domain resource indication information is less than or equal to a preset subcarrier spacing  $f_1$ ,  $K_i=1$  and  $F$  is a second value; and

when the frequency point of the serving cell where the terminal device is located is greater than 6GHz, or the subcarrier spacing  $f$  of the SL SSB carrying the time domain resource indication information is greater than the preset subcarrier spacing  $f_1$ ,  $K_i=f/f_1$  and  $F$  is a first value, or,  $K_i=1$  and  $F$  is the second value.

5. The method of claim 1, wherein, when a frequency point of a serving cell where the terminal device is located is less than or equal to 6GHz, or a subcarrier spacing  $f$  of a SL SSB carrying the time domain resource indication information is less than or equal to a preset subcarrier spacing  $f_1$ ,  $K_i=1$  and  $F$  is a second value;

when the frequency point of the serving cell where the terminal device is located is greater than 6GHz or the subcarrier spacing  $f$  of the SL SSB carrying the time domain resource indication information is greater than the preset subcarrier spacing  $f_1$ , and the transmission period combination does not belong to the first transmission period combination set,  $K_i=1$  and  $F$  is a first value; and

when the frequency point of the serving cell where the terminal device is located is greater than 6GHz or the subcarrier spacing  $f$  of the SL SSB carrying the time domain resource indication information is greater than the preset subcarrier spacing  $f_1$ , and the transmission period combination belongs to the first transmission period combination set,  $K_i=f/f_1$  and  $F$  is the first value, or,  $K_i=1$  and  $F$  is the second value,

wherein the first transmission period combination set is an empty set or comprises at least part of following transmission period combinations:

10ms transmission period and 10ms transmission period, 5ms transmission period and 5ms transmission period, 1ms transmission period and 4ms transmission period, 4ms transmission period and 1ms transmission period, 2ms transmission period and 3ms transmission period, 3ms transmission period and 2ms transmission period, 1ms transmission period and 3ms transmission period, 3ms transmission period and 1ms transmission period, and 2ms transmission period and 2ms transmission period.

6. The method of claim 1, wherein, when a frequency point of a serving cell where the terminal device is located is less than or equal to 6GHz, or a subcarrier spacing  $f$  of a SL SSB carrying the time domain resource indication information is less than or equal to a preset subcarrier spacing  $f_1$ ,  $K_i=1$  and  $F$  is a second value;

when the frequency point of the serving cell where the terminal device is located is greater than 6GHz or the subcarrier spacing  $f$  of the SL SSB carrying the time domain resource indication information is greater than the preset subcarrier spacing  $f_1$ , and the transmission period combination does not belong to the first transmission period combination set,  $K_i=1$  and  $F$  is a first value;

when the frequency point of the serving cell where the terminal device is located is greater than 6GHz or the subcarrier spacing  $f$  of the SL SSB carrying the time domain resource indication information is greater than the preset subcarrier spacing  $f_1$ , the transmission period

combination belongs to the first transmission period combination set, and a first transmission period and a second transmission period in the transmission period combination are the same,  $K_i=f/f_1$  and  $F$  is the first value, or,  $K_i=1$  and  $F$  is the second value; and

when the frequency point of the serving cell where the terminal device is located is greater than 6GHz or the subcarrier spacing  $f$  of the SL SSB carrying the time domain resource indication information is greater than the preset subcarrier spacing  $f_1$ , the transmission period combination belongs to the first transmission period combination set, and the first transmission period and the second transmission period in the transmission period combination are different,  $K_1$  corresponding to the first transmission period is equal to 1 and  $F$  is the first value,  $K_2$  corresponding to the second transmission period is equal to  $f/f_1$  and  $F$  is the first value, or,  $K_2$  corresponding to the second transmission period is equal to 1 and  $F$  is the second value,

wherein the first transmission period combination set comprises at least part of following transmission period combinations:

10ms transmission period and 10ms transmission period, 5ms transmission period and 5ms transmission period, 1ms transmission period and 4ms transmission period, 4ms transmission period and 1ms transmission period, 2ms transmission period and 3ms transmission period, 3ms transmission period and 2ms transmission period, 1ms transmission period and 3ms transmission period, 3ms transmission period and 1ms transmission period, and 2ms transmission period and 2ms transmission period.

7. The method of claim 3 or 6, wherein the first transmission period is less than the second transmission period.

8. The method of any one of claims 2-6, wherein the first value is greater than the second value.

9. The method of claim 1, wherein the number of time domain resource units is also configured to indicate the number of available symbols in the transmission period corresponding to the number of available time slots being 0.

10. A terminal device, comprising a communication unit configured to send time domain resource indication information, wherein the time domain resource indication information is configured to indicate a transmission period and a number of time domain resource units,

wherein the transmission period comprises: a transmission period combination, and the number

of time domain resource units is configured to indicate a number  $N_i$  of available time slots in each transmission period, wherein  $N_i = M_i * K_i$ ,  $M_i$  is the number of time domain resource units, a time domain resource unit comprises  $K_i$  time slots, a subcarrier spacing corresponding to the  $K_i$  time slots is  $F$ , and  $K_i$  is a predefined positive integer.

11. The terminal device of claim 10, wherein, when the transmission period combination does not belong to a first transmission period combination set,  $K_i = 1$  and  $F$  is a first value; and

when the transmission period combination belongs to the first transmission period combination set,  $K_i$  is a predefined positive integer greater than 1, and  $F$  is the first value; or,  $K_i = 1$  and  $F$  is a second value,

wherein the first transmission period combination set is an empty set or comprises at least part of following transmission period combinations:

10ms transmission period and 10ms transmission period, 5ms transmission period and 5ms transmission period, 1ms transmission period and 4ms transmission period, 4ms transmission period and 1ms transmission period, 2ms transmission period and 3ms transmission period, 3ms transmission period and 2ms transmission period, 1ms transmission period and 3ms transmission period, 3ms transmission period and 1ms transmission period, and 2ms transmission period and 2ms transmission period.

12. The terminal device of claim 10, wherein, when the transmission period combination does not belong to a first transmission period combination set,  $K_i = 1$  and  $F$  is a first value; and

when the transmission period combination belongs to the first transmission period combination set, and a first transmission period and a second transmission period in the transmission period combination are the same,  $K_i$  is a predefined positive integer greater than 1 and  $F$  is the first value, or,  $K_i = 1$  and  $F$  is a second value; and

when the transmission period combination belongs to the first transmission period combination set, and the first transmission period and the second transmission period in the transmission period combination are different,  $K_1$  corresponding to the first transmission period is equal to 1 and  $F$  is the first value,  $K_2$  corresponding to the second transmission period is a predefined positive integer greater than 1 and  $F$  is the first value, or,  $K_2$  corresponding to the second transmission period is equal to 1 and  $F$  is the second value,

wherein the first transmission period combination set is an empty set or comprises at least part of following transmission period combinations:

10ms transmission period and 10ms transmission period, 5ms transmission period and 5ms transmission period, 1ms transmission period and 4ms transmission period, 4ms transmission period and 1ms transmission period, 2ms transmission period and 3ms transmission period, 3ms transmission period and 2ms transmission period, 1ms transmission period and 3ms transmission period, 3ms transmission period and 1ms transmission period, and 2ms transmission period and 2ms transmission period.

13. The terminal device of claim 10, wherein, when a frequency point of a serving cell where the terminal device is located is less than or equal to 6GHz or a subcarrier spacing  $f$  of a SideLink (SL) Synchronization Signal and PBCH block (SSB) carrying the time domain resource indication information is less than or equal to a preset subcarrier spacing  $f_1$ ,  $K_i=1$  and  $F$  is a second value; and

when the frequency point of the serving cell where the terminal device is located is greater than 6GHz, or the subcarrier spacing  $f$  of the SL SSB carrying the time domain resource indication information is greater than the preset subcarrier spacing  $f_1$ ,  $K_i=f/f_1$  and  $F$  is a first value, or,  $K_i=1$  and  $F$  is the second value.

14. The terminal device of claim 10, wherein, when a frequency point of a serving cell where the terminal device is located is less than or equal to 6GHz, or a subcarrier spacing  $f$  of a SL SSB carrying the time domain resource indication information is less than or equal to a preset subcarrier spacing  $f_1$ ,  $K_i=1$  and  $F$  is a second value;

when the frequency point of the serving cell where the terminal device is located is greater than 6GHz or the subcarrier spacing  $f$  of the SL SSB carrying the time domain resource indication information is greater than the preset subcarrier spacing  $f_1$ , and the transmission period combination does not belong to the first transmission period combination set,  $K_i=1$  and  $F$  is a first value; and

when the frequency point of the serving cell where the terminal device is located is greater than 6GHz or the subcarrier spacing  $f$  of the SL SSB carrying the time domain resource indication information is greater than the preset subcarrier spacing  $f_1$ , and the transmission period combination belongs to the first transmission period combination set,  $K_i=f/f_1$ , and  $F$  is

the first value, or,  $K_i=1$  and  $F$  is the second value,

wherein the first transmission period combination set is an empty set or comprises at least part of following transmission period combinations:

10ms transmission period and 10ms transmission period, 5ms transmission period and 5ms transmission period, 1ms transmission period and 4ms transmission period, 4ms transmission period and 1ms transmission period, 2ms transmission period and 3ms transmission period, 3ms transmission period and 2ms transmission period, 1ms transmission period and 3ms transmission period, 3ms transmission period and 1ms transmission period, and 2ms transmission period and 2ms transmission period.

15. The terminal device of claim 10, wherein, when a frequency point of a serving cell where the terminal device is located is less than or equal to 6GHz, or a subcarrier spacing  $f$  of a SL SSB carrying the time domain resource indication information is less than or equal to a preset subcarrier spacing  $f_1$ ,  $K_i=1$  and  $F$  is a second value;

when the frequency point of the serving cell where the terminal device is located is greater than 6GHz or the subcarrier spacing  $f$  of the SL SSB carrying the time domain resource indication information is greater than the preset subcarrier spacing  $f_1$ , and the transmission period combination does not belong to the first transmission period combination set,  $K_i=1$  and  $F$  is a first value;

when the frequency point of the serving cell where the terminal device is located is greater than 6GHz or the subcarrier spacing  $f$  of the SL SSB carrying the time domain resource indication information is greater than the preset subcarrier spacing  $f_1$ , the transmission period combination belongs to the first transmission period combination set, and a first transmission period and a second transmission period in the transmission period combination are the same,  $K_i=f/f_1$  and  $F$  is the first value, or,  $K_i=1$  and  $F$  is the second value; and

when the frequency point of the serving cell where the terminal device is located is greater than 6GHz or the subcarrier spacing  $f$  of the SL SSB carrying the time domain resource indication information is greater than the preset subcarrier spacing  $f_1$ , the transmission period combination belongs to the first transmission period combination set, and the first transmission period and the second transmission period in the transmission period combination are different,  $K_1$  corresponding to the first transmission period is equal to 1 and  $F$  is the first value,  $K_2$

corresponding to the second transmission period is equal to  $f/f_1$  and  $F$  is the first value, or,  $K_2$  corresponding to the second transmission period is equal to 1 and  $F$  is the second value,

wherein the first transmission period combination set comprises at least part of following transmission period combinations:

10ms transmission period and 10ms transmission period, 5ms transmission period and 5ms transmission period, 1ms transmission period and 4ms transmission period, 4ms transmission period and 1ms transmission period, 2ms transmission period and 3ms transmission period, 3ms transmission period and 2ms transmission period, 1ms transmission period and 3ms transmission period, 3ms transmission period and 1ms transmission period, and 2ms transmission period and 2ms transmission period.

16. The terminal device of claim 12 or 15, wherein the first transmission period is less than the second transmission period.

17. The terminal device of any one of claims 11-15, wherein the first value is greater than the second value.

18. The terminal device of claim 10, wherein the number of time domain resource units is also configured to indicate the number of available symbols in the transmission period corresponding to the number of available time slots being 0.

19. A computer-readable storage medium, on which a computer program is stored, wherein when executed by a processor, the program implements the steps of the method of any one of claims 1-9.

20. A terminal device, comprising a memory, a processor and a computer program which is stored on the memory and may run on the processor, wherein when executing the program, the processor implements the steps of the method of any one of claims 1-9.