CLAIMS

What is claimed is:

1. A configuration information indication method, applied to a communication apparatus, comprising:

receiving an uplink-downlink time division duplex TDD configuration from a network device, the uplink-downlink TDD configuration comprises a quantity of TDD patterns and a TDD pattern periodicity; and

sending indication information to a second terminal device based on the uplink-downlink TDD configuration, the indication information is a bit sequence with 12 bits, the bit sequence comprises a first bit sequence and a second bit sequence, a first part of bits in the first bit sequence indicates the quantity of TDD patterns is 1 or 2, and a second part of bits in the first bit sequence indicates the TDD pattern periodicity of each of the 1 or 2 TDD patterns, the second bit sequence indicates uplink, UL, transmission duration in the TDD pattern periodicity of the 1 TDD pattern or the second bit sequence indicates UL transmission duration in the TDD pattern periodicity of each of the 2 TDD patterns, wherein

the first part of bits in the first bit sequence is 1 bit, the second part of bits in the first bit sequence is 4 bits, the second bit sequence is 7 bits.

2. The method according to claim 1, wherein

when the indication information indicates that the quantity of the TDD patterns is 1, the TDD pattern is a pattern 1, the 4 bits indicates the periodicity of the pattern 1.

3. The method according to claim 1 or 2, wherein

when the indication information indicates that the quantity of the TDD pattern is 2, the TDD patterns are a pattern 1 and a pattern 2, the 4 bits indicates a periodicity combination of a first periodicity P of the pattern 1 and a second periodicity P_2 of the pattern 2..

4. The method according to any one of claims 1 to 3, wherein

when the indication information indicates that the quantity of TDD patterns is 2, the TDD patterns are a pattern 1 and a pattern 2, and the second part of bits in the first bit sequence indicates an index corresponding to a periodicity combination of a first periodicity P of the pattern 1 and a second periodicity P_2 of the pattern 2, wherein

the second part of bits in the first bit sequence indicates a number of the index is 0, the first periodicity P is 0.5ms and the second periodicity P_2 is 0.5ms,

the second part of bits in the first bit sequence indicates a number of the index is 1, the first periodicity P is 0.625ms and the second periodicity P_2 is 0.625ms,

the second part of bits in the first bit sequence indicates a number of the index is 2, the first periodicity P is 1ms and the second periodicity P_2 is 1ms,

the second part of bits in the first bit sequence indicates a number of the index is 3, the first periodicity P is 0.5ms and the second periodicity P_2 is 2ms,

the second part of bits in the first bit sequence indicates a number of the index is 4, the first periodicity P is 1.25ms and the second periodicity P_2 is 1.25ms,

the second part of bits in the first bit sequence indicates a number of the index is 5, the first periodicity P is 2ms and the second periodicity P_2 is 0.5ms,

the second part of bits in the first bit sequence indicates a number of the index is 6, the first periodicity P is 1ms and the second periodicity P_2 is 3ms,

the second part of bits in the first bit sequence indicates a number of the index is 7, the first periodicity P is 2ms and the second periodicity P_2 is 2ms,

the second part of bits in the first bit sequence indicates a number of the index is 8, the first periodicity P is 3ms and the second periodicity P_2 is 1ms,

the second part of bits in the first bit sequence indicates a number of the index is 9, the first periodicity P is 1ms and the second periodicity P_2 is 4ms,

the second part of bits in the first bit sequence indicates a number of the index is 10, the first periodicity P is 2ms and the second periodicity P_2 is 3ms,

the second part of bits in the first bit sequence indicates a number of the index is 11, the first periodicity P is 2.5ms and the second periodicity P_2 is 2.5ms,

the second part of bits in the first bit sequence indicates a number of the index is 12, the first periodicity P is 3ms and the second periodicity P_2 is 2ms,

the second part of bits in the first bit sequence indicates a number of the index is 13, the first periodicity P is 4ms and the second periodicity P_2 is 1ms,

the second part of bits in the first bit sequence indicates a number of the index is 14, the first periodicity P is 5ms and the second periodicity P_2 is 5ms, or

the second part of bits in the first bit sequence indicates a number of the index is 15, the first

periodicity P is 10ms and the second periodicity P_2 is 10ms.

5. The method according to any one of claims 1 to 4, wherein

a value 1 of the first part of bits indicates that the quantity of TDD patterns is 2.

6. The method according to any one of claims 1 to 5, wherein the second bit sequence indicates a quantity of slots that corresponds to the UL transmission duration in the periodicity of the 1 TDD pattern, or the second bit sequence indicates a quantity of slots that corresponds to the UL transmission duration in the periodicity of each of the 2 TDD patterns.

7. The method according to any one of claims 1 to 6, wherein

the indication information is carried on a physical sidelink broadcast channel PSBCH of a sidelink synchronization signal block S-SSB, the UL transmission duration in the TDD pattern periodicity is determined based on a ratio of a subcarrier spacing SCS of the S-SSB to a reference SCS comprised in the uplink-downlink TDD configuration.

8. The method according to claim 7, wherein

the subcarrier spacing SCS of the S-SSB is an SCS configured on a sidelink bandwidth part BWP.

9. The method according to any one of claims 1 to 10, wherein

the indication information is carried on a physical sidelink broadcast channel PSBCH of a sidelink synchronization signal block, S-SSB.

10. A configuration information indication method, comprising:

receiving indication information from a first terminal device, wherein the indication information comprises a first bit sequencewith 12 bits, the bit sequence comprises a first bit sequence and a second bit sequence, a first part of bits in the first bit sequence indicate the quantity of TDD patterns is 1 or 2, and a second part of bits in the first bit sequence indicates the TDD pattern periodicity of each of the 1 or 2 TDD patterns, the second bit sequence indicates uplink, UL, transmission duration in the TDD pattern periodicity of the 1 TDD pattern or the second bit sequence indicates UL transmission duration in the TDD pattern periodicity of each of the 2 TDD patterns, wherein the first part of bits in the first bit sequence is 1 bit, the second part of bits in the first bit sequence is 4 bits, the second bit sequence is 7 bits; and

determining the quantity of TDD patterns and the TDD pattern periodicity based on the indication information.

11. The method according to claim 10, wherein determining the quantity of TDD patterns and

the TDD pattern periodicity based on the indication information, comprising:

when the first part of bits in the first bit sequence indicates the quantity of the TDD patterns is 1, determining the quantity of the TDD patterns is 1 and the TDD pattern is a pattern 1, and determining the periodicity of the pattern 1 based on the 4 bits.

12. The method according to claim 10 or 11, wherein determining the quantity of TDD patterns and the TDD pattern periodicity based on the indication information, comprising:

when the first part of bits in the first bit sequence indicates the quantity of the TDD patterns is 2, determining the quantity of the TDD patterns is 2 and the TDD patterns are a pattern 1 and a pattern 2, and determining a periodicity combination of a first periodicity P of the pattern 1 and a second periodicity P_2 of the pattern 2 based on the 4 bits.

13. The method according to any one of claims 10 to 12, wherein determining the quantity of TDD patterns and the TDD pattern periodicity based on the indication information, comprising:

when the indication information indicates that the quantity of TDD patterns is 2, determining the quantity of TDD patterns is 2 and the TDD patterns are a pattern 1 and a pattern 2; and the second part of bits in the first bit sequence indicates an index corresponding to a periodicity combination of a first periodicity P of the pattern 1 and a second periodicity P_2 of the pattern 2, wherein

when the second part of bits in the first bit sequence indicates a number of the index is 0, determining the first periodicity P is 0.5ms and the second periodicity P_2 is 0.5ms,

when the second part of bits in the first bit sequence indicates a number of the index is 1, determining the first periodicity P is 0.625ms and the second periodicity P_2 is 0.625ms,

when the second part of bits in the first bit sequence indicates a number of the index is 2, determining the first periodicity P is 1ms and the second periodicity P_2 is 1ms,

when the second part of bits in the first bit sequence indicates a number of the index is 3, determining the first periodicity P is 0.5ms and the second periodicity P_2 is 2ms,

when the second part of bits in the first bit sequence indicates a number of the index is 4, determining the first periodicity P is 1.25ms and the second periodicity P_2 is 1.25ms,

when the second part of bits in the first bit sequence indicates a number of the index is 5, determining the first periodicity P is 2ms and the second periodicity P_2 is 0.5ms,

when the second part of bits in the first bit sequence indicates a number of the index is 6, determining the first periodicity P is 1ms and the second periodicity P_2 is 3ms,

when the second part of bits in the first bit sequence indicates a number of the index is 7, determining the first periodicity P is 2ms and the second periodicity P_2 is 2ms,

when the second part of bits in the first bit sequence indicates a number of the index is 8, determining the first periodicity P is 3ms and the second periodicity P_2 is 1ms,

when the second part of bits in the first bit sequence indicates a number of the index is 9, determining the first periodicity P is 1ms and the second periodicity P_2 is 4ms,

when the second part of bits in the first bit sequence indicates a number of the index is 10, determining the first periodicity P is 2ms and the second periodicity P_2 is 3ms,

when the second part of bits in the first bit sequence indicates a number of the index is 11, determining the first periodicity P is 2.5ms and the second periodicity P_2 is 2.5ms,

when the second part of bits in the first bit sequence indicates a number of the index is 12, determining the first periodicity P is 3ms and the second periodicity P_2 is 2ms,

when the second part of bits in the first bit sequence indicates a number of the index is 13, determining the first periodicity P is 4ms and the second periodicity P_2 is 1ms,

when the second part of bits in the first bit sequence indicates a number of the index is 14, determining the first periodicity P is 5ms and the second periodicity P_2 is 5ms, or

when the second part of bits in the first bit sequence indicates a number of the index is 15, determining the first periodicity P is 10ms and the second periodicity P_2 is 10ms.

14. The method according to any one of claims 10 to 13, wherein

when the first part of bits in the first bit sequence indicates the quantity of the TDD patterns is 2, determining the quantity of the TDD patterns is 2 and the TDD patterns are a pattern 1 and a pattern 2, comprising:

when a value 1 of the first part of bits is 1, determining that the quantity of TDD patterns is 2 and the TDD patterns are a pattern 1 and a pattern 2.

15. The method according to any one of claims 10 to 14, wherein the second bit sequence indicates a quantity of slots that corresponds to the UL transmission duration in the periodicity of the 1 TDD pattern; orthe second bit sequence indicates a quantity of slots that corresponds to the UL transmission duration in the periodicity of each of the 2 TDD patterns.

16. The method according to any one of claims 10 to 15, wherein

the indication information is carried on a physical sidelink broadcast channel PSBCH of a sidelink synchronization signal block S-SSB.

17. The method according to any one of claims 10 to 16, wherein

the UL transmission duration in the TDD pattern periodicity is related to a ratio of a subcarrier spacing SCS of the S-SSB to a reference SCS.

18. The method according to claim 17, wherein

the subcarrier spacing SCS of the S-SSB is an SCS configured on a sidelink bandwidth part BWP.

19. A communication apparatus comprising a processor, wherein a program is run by the processor, the method according to any one of claims 1 to 9 is implemented.

20. The communication apparatus according to claim 19, wherein the communication apparatus further comprises a memory, and the program is strored in the memory.

21. A communication apparatus comprising a processor, wherein a program is run by the processor, the method according to any one of claims 10 to 18 is implemented.

22. The communication apparatus according to claim 21, wherein the communication apparatus further comprises a memory, and the program is strored in the memory.

23. A communication apparatus, configured to perform the method according to any one of claims 1 to 9.

24. A communication apparatus, configured to perform the method according to any one of claims 10 to 18.

25. A computer readable storage medium, configured to store instructions, wherein when the instructions are executed, the method according to any one of claims 1 to 9 is implemented.

26. A computer readable storage medium, configured to store instructions, wherein when the instructions are executed, the method according to any one of claims 10 to 18 is implemented.

27. A computer program, comprising instructions, wherein when the instructions are run on a computer, the method according to any one of claims 1 to 9 is implemented.

28. A computer program, comprising instructions, wherein when the instructions are run on a computer, the method according to any one of claims 10 to 18 is implemented.