CLAIMS

What is claimed is:

1. A transmission timing determining method, comprising:

receiving, by a first node, configuration information from a second node, wherein the configuration information comprises an association relationship between a time unit index and a timing type;

determining, by the first node based on the association relationship, a first timing type associated with a first time unit; and

determining, by the first node based on the first timing type, a transmission timing for performing uplink transmission in the first time unit;

wherein the association relationship between the time unit index and the timing type indicates some time units in a system frame, and a timing type for an unindicated time unit in the system frame is a default timing type.

2. The method according to claim 1, wherein the first timing type comprises any one of timing type 1, timing type 2 and timing type 3.

3. The method according to claim 2, wherein the bits corresponding to the timing type 1 are 00, the bits corresponding to the timing type 2 are 01, the bits corresponding to the timing type 3 are 10.

4. The method according to any one of claims 1 to 3, wherein the time unit index is an index determined at a reference subcarrier spacing; and

the determining, by the first node based on the association relationship, a first timing type associated with a first time unit comprises:

determining, by the first node, the first timing type associated with the first time unit based on the reference subcarrier spacing, a subcarrier spacing corresponding to the first time unit, and the association relationship.

5. The method according to claim 4, wherein the determining, by the first node, the first timing type associated with the first time unit based on the reference subcarrier spacing, a subcarrier spacing corresponding to the first time unit, and the association relationship comprises:

determining, by the first node based on the subcarrier spacing corresponding to the first time unit, a first time unit index that corresponds to the first time unit and that is at the reference

subcarrier spacing; and

determining, by the first node based on the association relationship, the first timing type associated with the first time unit index.

6. The method according to claim 4 or 5, wherein the reference subcarrier spacing is a subcarrier spacing of a serving carrier of the first node;

the reference subcarrier spacing is a subcarrier spacing of an active bandwidth part BWP of the first node; or

the reference subcarrier spacing is a subcarrier spacing indicated by an instruction from the second node.

7. The method according to any one of claims 1 to 6, wherein the first timing type comprises any one of the following:

an uplink transmission timing is determined based on timing advance TA indication information from the second node;

an uplink sending timing of a mobile termination MT of the first node is aligned with a downlink sending timing of a distributed unit DU of the first node; or

an uplink receiving timing of the DU of the first node is aligned with a downlink receiving timing of the MT of the first node.

8. The method according to any one of claims 1 to 7, wherein the association relationship between the time unit index and the timing type is associated with an uplink transmission type, and the uplink transmission type comprises one or more of a physical uplink shared channel PUSCH, a physical uplink control channel PUCCH, or a sounding reference signal SRS.

9. A transmission timing determining apparatus, applied to a first node, and comprising:

a communication module, configured to receive configuration information from a second node, wherein the configuration information comprises an association relationship between a time unit index and a timing type; and

a processing module, configured to: determine, based on the association relationship, a first timing type associated with a first time unit, and determine, based on the first timing type, a transmission timing for performing uplink transmission in the first time unit;

wherein the association relationship between the time unit index and the timing type indicates some time units in a system frame, and a timing type for an unindicated time unit in the system frame is a default timing type.

10. The apparatus according to claim 9, wherein the first timing type comprises any one of timing type 1, timing type 2 and timing type 3.

11. The apparatus according to claim 10, wherein the bits corresponding to the timing type 1 are 00, the bits corresponding to the timing type 2 are 01, the bits corresponding to the timing type 3 are 10.

12. The apparatus according to claim 9, wherein the time unit index is an index determined at a reference subcarrier spacing; and

when determining, based on the association relationship, the first timing type associated with the first time unit, the processing module is specifically configured to:

determine the first timing type associated with the first time unit based on the reference subcarrier spacing, a subcarrier spacing corresponding to the first time unit, and the association relationship.

13. The apparatus according to claim 12, wherein when determining the first timing type associated with the first time unit based on the reference subcarrier spacing, the subcarrier spacing corresponding to the first time unit, and the association relationship, the processing module is specifically configured to:

determine, based on the subcarrier spacing corresponding to the first time unit, a first time unit index that corresponds to the first time unit and that is at the reference subcarrier spacing; and

determine, based on the association relationship, the first timing type associated with the first time unit index.

14. The apparatus according to claim 12 or 13, wherein the reference subcarrier spacing is a subcarrier spacing of a serving carrier of the first node;

the reference subcarrier spacing is a subcarrier spacing of an active bandwidth part BWP of the first node; or

the reference subcarrier spacing is a subcarrier spacing indicated by an instruction from the second node.

15. The apparatus according to any one of claims 9 to 14, wherein the first timing type comprises any one of the following:

an uplink transmission timing is determined based on timing advance TA indication information from the second node;

an uplink sending timing of a mobile termination MT of the first node is aligned with a

downlink sending timing of a distributed unit DU of the first node; or

an uplink receiving timing of the DU of the first node is aligned with a downlink receiving timing of the MT of the first node.

16. The apparatus according to any one of claims 9 to 15, wherein the association relationship between the time unit index and the timing type is associated with an uplink transmission type, and the uplink transmission type comprises one or more of a physical uplink shared channel PUSCH, a physical uplink control channel PUCCH, or a sounding reference signal SRS.

17. A communication apparatus, comprising a processor and a communication interface, wherein the communication interface is configured to communicate with another communication apparatus, and the processor is configured to run a group of programs, to enable the communication apparatus to implement the method according to any one of claims 1 to 8.

18. A chip system, wherein the chip system comprises a processor, the processor is configured to be coupled to a memory, and the processor is configured to invoke a program to implement the method according to any one of claims 1 to 8.

19. A computer-readable storage medium, wherein the computer storage medium stores computer-readable instructions, and when the computer-readable instructions are run on a communication apparatus, the communication apparatus is enabled to perform the method according to any one of claims 1 to 8.