

CLAIMS

1. An information transmission method, applied to a first communication node, the method comprising:

acquiring capability information reported by a terminal, the capability information indicating clock related capability supported by the terminal; and

sending m types of clock information to a terminal based on the capability information, m being greater than or equal to 1.

2. The method of claim 1, further comprising: acquiring clock information,

wherein acquiring the clock information comprises at least one of the following:

acquiring the clock information from a core network;

acquiring the clock information from an adjacent communication node;

receiving the clock information sent by the terminal; or,

acquiring the clock information from a specific network system.

3. The method of claim 1, wherein the capability information comprises at least one of the following:

a clock type supported by the terminal; or,

at least one of synchronization precision information or synchronization granularity information supported by the terminal.

4. The method of claim 2, wherein the clock information sent by the terminal comprises:

clock information of a system to which the terminal is being connected.

5. The method of claim 2, wherein the clock information comprises at least one of the following:

time information of Universal Time Coordinated (UTC);

an offset between the UTC and Global Positioning System (GPS);

information about a relationship between Daylight Saving Time (DST) and local time;

an offset between the UTC and the local time;

an offset between the UTC and a specific network;

a mapping relationship between the UTC and a System Frame Number (SFN);

indication information about whether the clock is a master clock;

level information of the clock;

information about an offset with respect to a reference time of a specific clock type;

synchronization precision information of the clock;

synchronization granularity information of the clock;

synchronization inaccuracy information;

type information of the clock;

reference time information;

position relationship indication information of the reference time information and a received signaling; or,

time update period information of the clock.

6. The method of claim 5, wherein the reference time information comprises at least one of the following:

reference system radio frame information;

reference subframe information;

reference slot information; or,

reference time symbol information.

7. An information transmission method, applied to a terminal, the method comprising:

sending at least one of capability information or clock information to a first communication node, the capability information indicating clock related capability supported by the terminal; and

receiving m types of clock information sent by the first communication node based on

the at least one of the capability information or clock information, m being greater than or equal to 1.

8. The method of claim 7, wherein the capability information comprises at least one of the following:

- a clock type supported by the terminal; or

- at least one of synchronization precision information or synchronization granularity information supported by the terminal.

9. The method of claim 7, wherein the sent clock information comprises:

- clock information of a system to which the terminal is being connected.

10. The method of claim 7, wherein the clock information comprises at least one of the following:

- time information of Universal Time Coordinated (UTC);

- an offset between the UTC and Global Positioning System (GPS);

- information about a relationship between Daylight Saving Time (DST) and local time;

- an offset between the UTC and the local time;

- an offset between the UTC and a specific network;

a mapping relationship between the UTC and a System Frame Number (SFN);

indication information about whether the clock is a master clock;

level information of the clock;

information about an offset with respect to a reference time of a specific clock type;

synchronization precision information of the clock;

synchronization granularity information of the clock;

synchronization inaccuracy information;

type information of the clock;

reference time information;

position relationship indication information of the reference time information and a received signaling; or,

time update period information of the clock.

11. The method of claim 10, wherein the reference time information comprises at least one of the following:

reference system radio frame information;

reference subframe information;

reference slot information; or,

reference time symbol information.

12. A terminal, comprising: a first communication interface, configured to send at least one of capability information or clock information to a first communication node, the capability information indicating clock related capability supported by the terminal, and receive m types of clock information sent by the first communication node based on the at least one of the capability information or clock information, m being greater than or equal to 1.

13. The terminal of claim 12, wherein the capability information comprises at least one of the following:

a clock type supported by the terminal; or

at least one of synchronization precision information or synchronization granularity information supported by the terminal.

14. The terminal of claim 12, wherein the clock information comprises at least one of the following:

time information of Universal Time Coordinated (UTC);

an offset between the UTC and Global Positioning System (GPS);

information about a relationship between Daylight Saving Time (DST) and local time;

an offset between the UTC and the local time;

an offset between the UTC and a specific network;

a mapping relationship between the UTC and a System Frame Number (SFN);

indication information about whether the clock is a master clock;

level information of the clock;

information about an offset with respect to a reference time of a specific clock type;

synchronization precision information of the clock;

synchronization granularity information of the clock;

synchronization inaccuracy information;

type information of the clock;

reference time information;

position relationship indication information of the reference time information and a received signaling; or,

time update period information of the clock.

15. The terminal of claim 14, wherein the reference time information comprises at least one of the following:

reference system radio frame information;

reference subframe information;

reference slot information; or,

reference time symbol information.

16. A communication node, comprising: a second communication interface, configured to acquire capability information reported by a terminal, the capability information indicating clock related capability supported by the terminal, and send m types of clock information to the terminal based on the capability information, m being greater than or equal to 1.

17. The communication node of claim 16, wherein the second communication interface is configured to acquire clock information through at least one of the following:

acquiring the clock information from a core network;

acquiring the clock information from an adjacent communication node;

receiving the clock information sent by the terminal; or,

acquiring the clock information from a specific network system.

18. The communication node of claim 16, wherein the capability information comprises at least one of the following:

a clock type supported by the terminal; or,

at least one of synchronization precision information or synchronization granularity information supported by the terminal.

19. The communication node of claim 17, wherein the clock information comprises at least one of the following:

time information of Universal Time Coordinated (UTC);

an offset between the UTC and Global Positioning System (GPS);

information about a relationship between Daylight Saving Time (DST) and local time;

an offset between the UTC and the local time;

an offset between the UTC and a specific network;

a mapping relationship between the UTC and a System Frame Number (SFN);

indication information about whether the clock is a master clock;

level information of the clock;

information about an offset with respect to a reference time of a specific clock type;

synchronization precision information of the clock;

synchronization granularity information of the clock;

synchronization inaccuracy information;

type information of the clock;

reference time information;

position relationship indication information of the reference time information and a

received signaling; or,

time update period information of the clock.

20. The communication node of claim 19, wherein the reference time information comprises at least one of the following:

reference system radio frame information;

reference subframe information;

reference slot information; or,

reference time symbol information.