WHAT IS CLAIMED IS:

1. A method for information updating, performed by a user equipment (UE) supporting satellite communication, comprising:

receiving an updated cell-specific offset sent by a base station;

receiving configuration information configured to indicate at least one of a time offset or a time window sent by the base station via a common signaling, wherein the time offset is configured to indicate a delay effective time for the updated cell-specific offset, and the time window is configured to indicate an invalid time for the updated cell-specific offset; and

using the updated cell-specific offset based on the at least one of the time offset or the time window.

2. The method according to claim 1, wherein receiving the updated cell-specific offset sent by the base station comprises:

receiving the updated cell-specific offset sent by the base station via updated system information.

3. The method according to claim 1, wherein receiving the updated cell-specific offset sent by the base station comprises:

receiving the updated cell-specific offset sent by the base station in a case that the UE and the base station are in a non-geostationary orbit (NGSO) scenario.

4. The method according to claim 1, wherein using the updated cell-specific offset based on the time offset comprises at least one of:

communicating with the base station using a cell-specific offset before update, within the time offset; or

communicating with the base station using the updated cell-specific offset, after delaying for the time offset.

5. The method according to claim 1, wherein the time offset is a fixed value or a configurable value.

6. The method according to claim 1, wherein using the updated cell-specific offset based on the time window comprises:

communicating with the base station using a UE-specific offset within the time window; and communicating with the base station using the updated cell-specific offset after the time window.

7. The method according to claim 6, wherein communicating with the base station using the UE-specific offset within the time window comprises at least one of:

performing a communication operation that requires to use a cell-specific offset, based on the UE-specific offset within the time window; or

not performing a communication operation that requires to use a cell-specific offset, within the time window.

8. A method for information updating, performed by a base station supporting satellite communication, comprising:

determining at least one of a time offset or a time window, wherein the time offset is configured to indicate a delay effective time for an updated cell-specific offset, and the time window is configured to indicate an invalid time for the updated cell-specific offset;

sending configuration information configured to indicate the at least one of the time offset or the time window to a user equipment (UE), via a common signaling; and

sending the updated cell-specific offset to the UE.

9. The method according to claim 8, wherein the time offset is a fixed value or a configurable value.

10. The method according to claim 8, wherein determining the time offset comprises:

determining the time offset based on a maximum round trip time (RTT) of signal transmission within a coverage area of the base station.

11. The method according to claim 8, wherein sending the updated cell-specific offset to the UE comprises:

determining whether the base station and the UE are in a non-geostationary orbit (NGSO) scenario based on ephemeris information, and sending the updated cell-specific offset to the UE in a case that the UE and the base station are in the NGSO scenario.

12. A user equipment (UE) supporting satellite communication, comprising:

a processor; and

a memory storing a computer program executable by the processor,

wherein the processor is configured to:

receive an updated cell-specific offset sent by a base station;

receive configuration information configured to indicate at least one of a time offset or a time window sent by the base station via a common signaling, wherein the time offset is configured to indicate a delay effective time for the updated cell-specific offset, and the time window is configured to indicate an invalid time for the updated cell-specific offset; and

use the updated cell-specific offset based on the at least one of the time offset or the time window.

13. The UE according to claim 12, wherein the processor is further configured to:

receive the updated cell-specific offset sent by the base station via updated system information.

14. The UE according to claim 12, wherein the processor is further configured to:

receive the updated cell-specific offset sent by the base station in a case that the UE and the base station are in a non-geostationary orbit (NGSO) scenario.

15. The UE according to claim 12, wherein the processor is further configured to perform at least one of:

communicating with the base station using a cell-specific offset before update, within the time offset; or

communicating with the base station using the updated cell-specific offset, after delaying for the time offset,

wherein the time offset is a fixed value or a configurable value.

16. The UE according to claim 12, wherein the processor is further configured to:

communicate with the base station using a UE-specific offset within the time window; and communicate with the base station using the updated cell-specific offset after the time window,

wherein communicating with the base station using the UE-specific offset within the time window comprises at least one of:

performing a communication operation that requires to use a cell-specific offset, based on the UE-specific offset within the time window; or

not performing a communication operation that requires to use a cell-specific offset, within

the time window.

17. A base station supporting satellite communication, comprising:

a processor; and

a memory storing a computer program executable by the processor,

wherein the processor is configured to perform the method for information updating according to any one of claims 8 to 11.