WHAT IS CLAIMED IS:

1. A method for determining a serving cell, performed by a user equipment (UE), wherein a current serving cell of the UE is a non-terrestrial network (NTN) cell, the method comprising:

when an acquisition situation of location information of the UE does not meet a preset condition, determining a new serving cell.

~~2. The method according to claim 1, wherein when the acquisition situation of the location information of the UE does not meet the preset condition, determining the new serving cell comprises:~~

~~when the acquisition situation does not meet the preset condition, and a duration for which the acquisition situation does not meet the preset condition reaches a preset duration, determining the new serving cell.~~

~~3~~2. The method according to claim 1~~ or 2~~, wherein the preset condition comprises~~ any one of~~:

the location information not being obtained by the UE~~; or~~

~~the location information being obtained by the UE, but at least one of a confidence and an uncertainty of the location information not meeting a preset threshold value requirement~~.

~~4~~3. The method according to claim 1 or 2~~any one of claims 1 to 3~~, wherein determining the new serving cell comprises:

determining the new serving cell via a cell selection, wherein the UE is in a non-connected state.

~~5~~4. The method according to claim ~~4~~3, wherein determining the new serving cell via the cell selection comprises:

based on a preset frequency priority configuration, determining the new serving cell in an order from a high frequency priority to a low frequency priority, wherein the preset frequency priority configuration is configured to indicate that a priority of a frequency used by an NTN cell is lower than a priority of a frequency used by a terrestrial network (TN) cell, wherein the frequency used by the NTN cell is different from the frequency used by the TN cell.

~~6~~5. The method according to claim ~~4~~3, wherein determining the new serving cell via the cell selection comprises:

based on a preset cell priority configuration, determining the new serving cell in an order from a high cell priority to a low cell priority, wherein the preset cell priority configuration is configured to indicate that a priority of an NTN cell is lower than a priority of a TN cell; wherein the NTN cell and the TN cell use a same frequency.

~~7~~6. The method according to any one of claims ~~4~~ 3 to ~~6~~5, further comprising:

based on a preset measurement standard, performing a cell measurement.

~~8~~7. The method according to claim ~~7~~6, wherein the preset measurement standard comprises at least one of:

when a signal quality of the current serving cell is greater than a preset co-frequency measurement threshold, and the acquisition situation meets the preset condition, the cell measurement not being performed for a co-frequency cell; otherwise, the cell measurement being performed for the co-frequency cell, wherein the co-frequency cell has a same frequency as the current serving cell;

when the signal quality of the current serving cell is greater than a preset inter-frequency measurement threshold, and the acquisition situation meets the preset condition, the cell measurement not being performed for a first type of cell; otherwise, the cell measurement being performed for the first type of cell, wherein a priority of a frequency used by the first type of cell is equal to or lower than a priority of a frequency used by the current serving cell; or

when the signal quality of the current serving cell is greater than the preset inter-frequency measurement threshold, the UE is configured with a high-priority measurement relaxation, and the acquisition situation meets the preset condition, the cell measurement not being performed for a second type of cell; otherwise, the cell measurement being performed for the second type of cell, wherein a priority of a frequency used by the second type of cell is higher than the priority of the frequency used by the current serving cell.

~~9~~8. The method according to any one of claims ~~4~~ 3 to ~~8~~7, further comprising:

recording information that the acquisition situation does not meet the preset condition via a minimization drive test (MDT) record.

~~10~~9. The method according to claim 1 or 2~~any one of claims 1 to 3~~, wherein determining the new serving cell comprises:

handing over a serving cell of the UE from the NTN cell to the new serving cell according to preconfigured handover information, wherein the preconfigured handover information is configured to indicate a TN cell that is capable of being used as the new serving cell when the acquisition situation does not meet the preset condition; wherein the UE is in a connected state.

~~11~~10. The method according to claim 1 or 2~~any one of claims 1 to 3~~, further comprising:

sending a first message to a network device, wherein the first message is configured to indicate the network device to hand over a serving cell of the UE from the NTN cell to a TN cell, wherein the UE is in a connected state.

~~12. The method according to claim 11, wherein sending the first message to the network device comprises:~~

~~sending the first message to the network device via a media access control control element (MAC CE) signaling; or~~

~~based on a preconfigured trigger condition, sending the first message to the network device via a radio resource control (RRC) signaling, wherein the preconfigured trigger condition comprises the acquisition situation not meeting the preset condition.~~

~~13~~11. The method according to ~~any one of claims 1 to 3~~claim 1 or 2, wherein determining the new serving cell comprises:

determining a TN cell as the new serving cell via a connection reestablishment process, wherein the UE is in a connected state.

~~14~~12. A method for determining a serving cell, performed by a network device and comprising:

based on a message sent by a user equipment (UE), determining a new serving cell for the UE, wherein a current serving cell of the UE is a non-terrestrial network (NTN) cell, and the message is sent by the UE when an acquisition situation of location information does not meet a preset condition.

~~15. The method according to claim 14, wherein the message is sent by the UE when the acquisition situation does not meet the preset condition, and a duration for which the acquisition situation does not meet the preset condition reaches a preset duration.~~

~~16~~13. The method according to claim 12~~14 or 15~~, wherein the preset condition comprises ~~any one of~~:

the location information not being obtained by the UE~~; or~~

~~the location information being obtained by the UE, but at least one of a confidence and an uncertainty of the location information not meeting a preset threshold value requirement~~.

~~17~~14. The method according to claim 12 or 13~~any one of claims 14 to 16~~, further comprising:

handing over a serving cell of the UE from the NTN cell to a TN cell.

~~18~~15. The method according to any one of claims ~~14~~ 12 to ~~17~~14, wherein determining the new serving cell for the UE further comprises:

sending a measurement indication message to the UE;

receiving a measurement report reported by the UE after performing a cell measurement based on the measurement indication message; and

determining a TN cell as the new serving cell according to the measurement report.

~~19~~16. An apparatus for determining a serving cell, wherein a current serving cell of the apparatus is a non-terrestrial network (NTN) cell, the apparatus comprising:

a processing module configured to determine a new serving cell when an acquisition situation of location information does not meet a preset condition.

~~20~~17. An apparatus for determining a serving cell, comprising:

a processing module configured to determine a new serving cell for a user equipment (UE)

based on a message sent by the UE, wherein a current serving cell of the UE is a non-terrestrial network (NTN) cell, and the message is sent by the UE when an acquisition situation of location information does not meet a preset condition.

~~21~~18. A user equipment~~communication device~~, comprising:

a transceiver;

a memory; and

a processor,

wherein the processor is connected to the transceiver and the memory respectively, and configured to ~~control a transmission and a reception of a wireless signal of the transceiver and cause~~perform the method according to any one of claims 1 to ~~13~~11 ~~to be implemented by executing computer-executable instructions on the memory~~.

~~22~~19. A network device~~communication device~~, comprising:

a transceiver;

a memory; and

a processor,

wherein the processor is connected to the transceiver and the memory respectively, and configured to ~~control a transmission and a reception of a wireless signal of the transceiver and cause~~perform the method according to any one of claims ~~14~~12 to ~~18~~15 ~~to be implemented by executing computer-executable instructions on the memory~~.

~~23~~20. A non-transitory computer-readable storage medium having stored therein computer-executable instructions that, when executed by a processor, cause the method according to any one of claims 1 to ~~13~~ 15 to be implemented.

~~24. A computer storage medium having stored therein computer-executable instructions that, when executed by a processor, cause the method according to any one of claims 14 to 18 to be implemented.~~