

WHAT IS CLAIMED IS:

1. An uplink timing advance (TA) processing method, performed by a terminal, the method comprising:

in response to determining that a target candidate cell configuration used by the terminal is changed to unavailable, keeping or discarding (101) a TA corresponding to a target candidate cell.

2. The method according to claim 1, wherein determining that the target candidate cell configuration used by the terminal is changed to unavailable comprises any one of:

in response to determining that the target candidate cell configuration is deactivated, determining that the target candidate cell configuration is changed to unavailable;

in response to receiving stop-using indication information sent by a network side device, determining that the target candidate cell configuration is changed to unavailable, wherein the stop-using indication information is configured to indicate the terminal to stop using the target candidate cell configuration.

3. The method according to claim 2, further comprising any one of:

in response to receiving change indication information sent by the network side device, triggering the terminal to deactivate the target candidate cell configuration, wherein the change indication information is configured to indicate the terminal to change the candidate cell configuration used by the terminal;

in response to determining that a preset condition for a candidate cell configuration change is met, triggering the terminal to deactivate the target candidate cell configuration.

4. The method according to claim 1, wherein keeping or discarding the TA corresponding to the target candidate cell comprises:

keeping or discarding (201) the TA corresponding to the target candidate cell based on the network configuration indication information sent by a network side device, wherein the network configuration indication information is configured to indicate the terminal to keep or discard the TA corresponding to the target candidate cell; or

based on a protocol agreement, keeping or discarding the TA corresponding to the target candidate cell.

5. The method according to claim 1, wherein keeping or discarding the TA corresponding to the target candidate cell comprises:

according to whether there is an activated candidate cell in a target timing advance group (TAG), keeping or discarding the TA corresponding to the target candidate cell, wherein the

target TAG is a TAG where the target candidate cell is located.

6. The method according to claim 5, wherein keeping or discarding the TA corresponding to the target candidate cell according to whether there is the activated candidate cell in the target TAG comprises:

in response to determining that there is the activated candidate cell in the target TAG, keeping the TA corresponding to the target candidate cell; and in response to determining that there is no activated candidate cell in the target TAG, discarding the TA corresponding to the target candidate cell.

7. The method according to claim 1, wherein keeping or discarding the TA corresponding to the target candidate cell comprises:

keeping or discarding the TA corresponding to the target candidate cell according to a cell type of the target candidate cell.

8. The method according to claim 7, wherein keeping or discarding the TA corresponding to the target candidate cell according to the cell type of the target candidate cell comprises:

when the cell type of the target candidate cell is a Secondary Cell (SCell), keeping the TA corresponding to the target candidate cell;

when the cell type of the target candidate cell is a Primary Cell (PCell) or a Primary Secondary Cell (PSCell), discarding the TA corresponding to the target candidate cell.

9. The method according to any one of claims 1 to 8, wherein keeping the TA corresponding to the target candidate cell comprises at least one of the following:

controlling a Time Alignment Timer (TAT) to continue running;

controlling the TAT to stop running, but keeping a TA value corresponding to the target candidate cell.

10. The method according to any one of claims 1 to 8, wherein discarding the TA corresponding to the target candidate cell comprises at least one of:

controlling a TAT to stop running;

determining that the TAT expires;

discarding a TA value corresponding to the target candidate cell;

controlling the TAT to stop running, and discarding the TA value corresponding to the target candidate cell;

determining that the TAT expires, and discarding the TA value corresponding to the target candidate cell.

11. A terminal behavior determination method, performed by a network side device, the

method comprising:

determining (401) that a terminal keeps or discards uplink timing advance (TA) corresponding to a target candidate cell.

12. The method according to claim 11, further comprising:

sending change indication information to the terminal, wherein the change indication information is configured to indicate the terminal to change a candidate cell configuration used by the terminal.

13. The method according to claim 11, further comprising:

sending stop-using indication information to the terminal, wherein the stop-using indication information is configured to indicate the terminal to stop using a target candidate cell configuration.

14. The method according to claim 11, wherein determining that the terminal keeps or discards the uplink timing TA corresponding to the target candidate cell comprises:

determining, based on network configuration indication information sent by the network side device to the terminal, that the terminal keeps or discards the TA corresponding to the target candidate cell, wherein the network configuration indication information is configured to indicate the terminal to keep or discard the TA corresponding to the target candidate cell; or

based on a protocol agreement, determining that the terminal keeps or discards the TA corresponding to the target candidate cell.

15. The method according to claim 11, wherein determining that the terminal keeps or discards the uplink timing TA corresponding to the target candidate cell comprises:

according to whether there is an activated candidate cell in a target timing advance group, TAG, determining that the terminal keeps or discards the TA corresponding to the target candidate cell, wherein the target TAG is a TAG where the target candidate cell is located.

16. The method according to claim 15, wherein determining that the terminal keeps or discards the TA corresponding to the target candidate cell according to whether there is the activated candidate cell in the target TAG comprises:

in response to determining that there is the activated candidate cell in the target uplink timing group TAG, determining that the terminal keeps the TA corresponding to the target candidate cell;

in response to determining that there is no activated candidate cell in the target TAG, determining that the terminal discards the TA corresponding to the target candidate cell.

17. The method according to claim 11, wherein determining that the terminal keeps or

discards the uplink timing TA corresponding to the target candidate cell comprises:

determining, according to a cell type of the target candidate cell, that the terminal keeps or discards the TA corresponding to the target candidate cell.

18. The method according to claim 17, wherein determining, according to the cell type of the target candidate cell, that the terminal keeps or discards the TA corresponding to the target candidate cell comprises:

when the cell type of the target candidate cell is a Secondary Cell (SCell), determining that the terminal keeps the TA corresponding to the target candidate cell;

when the cell type of the target candidate cell is a Primary Cell (PCell) or a Primary Secondary Cell (PSCell), determining that the terminal discards the TA corresponding to the target candidate cell.

19. An uplink timing maintenance apparatus, applied to a terminal, the apparatus comprising:

a maintenance module (701) configured to, in response to determining that a target candidate cell configuration used by the terminal is changed to unavailable, keep or discard a TA corresponding to a target candidate cell.

20. A terminal behavior determination apparatus, applied to a network side device, the apparatus comprising:

a determination module (801) configured to determine that the terminal maintains or discards uplink timing TA corresponding to a target candidate cell.