WHAT IS CLAIMED IS:

1. A terminal device comprising:

at least one processor; and

at least one memory including program code;

wherein the at least one memory and the program code are configured to, with the at least one processor, cause the terminal device, while the terminal device is in a Radio Resource Control, RRC, inactive state, to:

determine that a small data transmission is allowed to be initiated at a RRC protocol layer of the terminal device;

in a case that the small data transmission is allowed to be initiated at the RRC protocol layer, determine that the small data transmission is allowed to be initiated at a Medium Access Control, MAC, protocol layer of the terminal device; and

in a case that the small data transmission is allowed to be initiated at the MAC protocol layer, determine, at the RRC protocol layer, to resume at least one radio bearer for the small data transmission, to initiate a communication procedure for the small data transmission with a network device.

2. The terminal device of claim 1, wherein the at least one memory and the program code are configured to, with the at least one processor, further cause the terminal device to initiate, at the RRC protocol layer, the communication procedure for the small data transmission in response to an indication from the MAC protocol layer that the small data transmission is allowed to be initiated at the MAC protocol layer.

3. The terminal device of claim 2, wherein the at least one memory and the program code are configured to, with the at least one processor, further cause the terminal device to

in a case that the small data transmission is allowed to be initiated at the RRC protocol layer, transmit, from the RRC protocol layer to the MAC protocol layer, a request to determine whether the small data transmission is allowed to be initiated at the MAC protocol layer;

in response to the request, determine that the small data transmission is allowed to be initiated at the MAC protocol layer; and

in a case that the small data transmission is allowed to be initiated at the MAC protocol layer, transmit the indication from the MAC protocol layer to the RRC protocol layer.

4. The terminal device of claim 1, wherein the at least one memory and the program code are configured to, with the at least one processor, further cause the terminal device to:

in a case that the small data transmission is allowed to be initiated at the RRC protocol layer, transmit, from the RRC protocol layer to the MAC protocol layer, a request to determine whether a small data transmission mode is allowed to be initiated at the MAC protocol layer;

in response to the request, determine that the small data transmission mode is allowed to be initiated at the MAC protocol layer;

in a case that the small data transmission mode is allowed to be initiated at the MAC protocol layer, transmit a further indication from the MAC protocol layer to the RRC protocol layer; and

in response to the further indication, initiate, via the RRC protocol layer, the communication procedure for the small data transmission according to the small data transmission mode.

5. The terminal device of claim 1, wherein the at least one memory and the program code are configured to, with the at least one processor, further cause the terminal device to determine that the small data transmission is allowed to be initiated at the RRC protocol layer by determining that a resource for the small data transmission is configured.

6. The terminal device of claim 1, wherein the at least one memory and the program code are configured to, with the at least one processor, further cause the terminal device to determine that the small data transmission is allowed to be initiated at the RRC protocol layer by determining that a resource for a small data transmission mode is configured.

7. The terminal device of claim 1, wherein the at least one memory and the program code are configured to, with the at least one processor, further cause the terminal device to determine that the small data transmission is allowed to be initiated at the RRC protocol layer by determining data is available in at least one radio bearer allowed for the small data transmission.

8. The terminal device of claim 1, wherein the at least one memory and the program code are configured to, with the at least one processor, further cause the terminal device to determine that the small data transmission is allowed to be initiated at the RRC protocol layer by determining that a volume of data to be transmitted meets a requirement based on a data

volume threshold configured for the small data transmission.

9. The terminal device of claim 4 or 6, wherein the small data transmission mode comprises one of the following:

a small data transmission mode based on a configured grant,

a small data transmission mode based on a random access procedure,

a small data transmission mode based on a two-step random access procedure, or

a small data transmission mode based on a four-step random access procedure.

10. The terminal device of claim 1, wherein the at least one memory and the program code are configured to, with the at least one processor, further cause the terminal device to determine that the small data transmission is allowed to be initiated at the MAC protocol layer by determining that a resource configured for the small data transmission is valid.

11. The terminal device of claim 1, wherein the at least one memory and the program code are configured to, with the at least one processor, further cause the terminal device to determine that the small data transmission is allowed to be initiated at the MAC protocol layer by determining that a resource configured for a small data transmission mode is valid.

12. The terminal device of claim 1, wherein the at least one memory and the program code are configured to, with the at least one processor, further cause the terminal device to determine that the small data transmission is allowed to be initiated at the MAC protocol layer by determining that a volume of data to be transmitted meets a requirement based on a data volume threshold configured for the small data transmission.

13. The terminal device of claim 1, wherein the at least one memory and the program code are configured to, with the at least one processor, further cause the terminal device to determine that the small data transmission is allowed to be initiated at the MAC protocol layer by determining that a volume of data to be transmitted meets a requirement based on a data volume threshold configured for a small data transmission mode.

14. The terminal device of claim 1, wherein the at least one memory and the program code are configured to, with the at least one processor, further cause the terminal device to determine that the small data transmission is allowed to be initiated at the MAC protocol layer

by determining that a channel quality between the terminal device and the network device meets a requirement based on a quality threshold configured for the small data transmission.

15. The terminal device of claim 1, wherein the at least one memory and the program code are configured to, with the at least one processor, further cause the terminal device to determine that the small data transmission is allowed to be initiated at the MAC protocol layer by determining that a channel quality between the terminal device and the network device meets a requirement based on a quality threshold configured for a small data transmission mode.

16. The terminal device of claim 1, wherein the at least one memory and the program code are configured to, with the at least one processor, further cause the terminal device to:

select one of a plurality of uplink carriers; and

determine whether the small data transmission is allowed to be initiated on the one of the plurality of uplink carriers.

17. The terminal device of claim 16, wherein the at least one memory and the program code are configured to, with the at least one processor, further cause the terminal device, for a given uplink carrier of the plurality of uplink carriers, to:

determine that a channel quality between the terminal device and the network device over the given uplink carrier meets a requirement based on a quality threshold configured for the small data transmission or for a small data transmission mode; and

select the given uplink carrier in a case that the channel quality meets the requirement based on the quality threshold.

18. The terminal device of claim 1, wherein the at least one memory and the program code are configured to, with the at least one processor, further cause the terminal device to transmit a request from the RRC protocol layer to a Packet Data Convergence Protocol, PDCP, protocol layer of the terminal device to resume the at least one radio bearer for the small data transmission.

19. The terminal device of claim 1, wherein the at least one memory and the program code are configured to, with the at least one processor, further cause the terminal device to:

in a case that the small data transmission is disallowed to be initiated at the RRC protocol layer or at the MAC protocol layer, initiate, via the RRC protocol layer, a further communication

procedure for non-small data transmission with the network device.

20. A method for a terminal device to be performed while the terminal device is in a Radio Resource Control, RRC, inactive state, the method comprising:

determining, that a small data transmission is allowed to be initiated at a RRC protocol layer of the terminal device;

in a case that the small data transmission is allowed to be initiated at the RRC protocol layer, determining whether the small data transmission is allowed to be initiated at a Medium Access Control, MAC, protocol layer of the terminal device; and

in a case that the small data transmission is allowed to be initiated at the MAC protocol layer, determining, at the RRC protocol layer, to resume at least one radio bearer for the small data transmission, to initiate a communication procedure for the small data transmission with a network device.

21. A computer readable medium comprising program instructions for causing an apparatus to perform at least the method of claim 20.