CLAIMS

1. A method for indicating protocol data unit session status, comprising:

indicating (S201), by a terminal device, activation and/or deactivation of a protocol data unit session ~~(~~, PDU session~~)~~ , based on configuration signaling sent by a network device,

wherein indicating (S201), by the terminal device, activation and/or deactivation of the PDU session based on the configuration signaling sent by the network device comprises:

indicating, by a radio resource control, RRC, layer to upper layers of the terminal device, deactivation of at least one PDU session when the terminal device releases a data radio bearer, DRB, corresponding to an identifier, ID, of a first DRB or DRBs corresponding to IDs of a first group of DRBs based on the configuration signaling such that the at least one PDU session has no DRB associated therewith, wherein the configuration signaling indicates to release the first DRB ID or the first group of DRB IDs.

2. The method of claim 1, wherein ~~said~~ indicating (S201), by ~~a~~ the terminal device, activation and/or deactivation of the~~a~~ PDU session based on the configuration signaling sent by ~~a~~ the network device comprises:

indicating, by ~~a radio resource control (~~the RRC~~)~~ layer to the upper layers of the terminal device, deactivation of a first PDU session or a first group of PDU sessions when the configuration signaling indicates to deactivate the first PDU session or the first group of PDU sessions.

3. The method of claim 2, wherein before ~~said~~ indicating, by the~~an~~ RRC layer to the upper layers of the terminal device, deactivation of ~~a~~ the first PDU session or ~~a~~ the first group of PDU sessions, the method further comprises:

releasing, by the terminal device, a ~~data radio bearer (~~DRB~~)~~ associated with the first PDU session or DRBs associated with the first group of PDU sessions.

~~4. The method of claim 1, wherein said indicating, by a terminal device, activation and/or deactivation of a PDU session based on configuration signaling sent by a network device comprises:~~

~~indicating, by an RRC layer to upper layers of the terminal device, deactivation of at least one PDU session when the terminal device releases a DRB corresponding to an identifier (ID) of a first DRB or DRBs corresponding to IDs of a first group of DRBs based on the~~

~~configuration signaling such that the at least one PDU session has no DRB associated therewith, wherein the configuration signaling indicates to release the first DRB ID or the first group of DRB IDs.~~

~~5~~4. The method of claim 41, wherein ~~said~~ the indicating (S201), by ~~a~~ the terminal device, activation and/or deactivation of ~~a~~ the PDU session based on the configuration signaling sent by ~~a~~ the network device comprises:

indicating, by the RRC layer to the upper layers of the terminal device, deactivation of a second PDU session when the configuration signaling further indicates to deactivate the second PDU session associated with a second DRB corresponding to a second DRB ID, wherein

the second DRB ID is the same as or different from the first DRB ID, and the first DRB ID belongs to the first group of DRB IDs, or the first DRB ID does not belong to the first group of DRB IDs.

~~6~~5. The method of claim 1, wherein ~~said~~ the indicating (S201), by ~~a~~ the terminal device, activation and/or deactivation of ~~a~~ the ~~protocol data unit session (~~PDU session~~)~~ based on the configuration signaling sent by ~~a~~ the network device comprises:

indicating, by ~~an~~ the RRC layer to the upper layers of the terminal device, activation of a third PDU session, when the configuration signaling indicates an ID of a second DRB or IDs of a second group of DRBs to be added by the terminal device, and the terminal device adds the DRB corresponding to the second DRB ID or the DRBs corresponding to the second group of DRB IDs as the first DRB(s) of the third PDU session.

~~7~~6. The method of any of claims 1 to ~~6~~5, wherein the configuration signaling is a ~~radio resource control (~~RRC~~)~~ reconfiguration message.

~~8~~7. The method of claim ~~7~~6, wherein the RRC reconfiguration message comprises a radio bearer configuration.

~~9~~8. A terminal device (300), comprising:

a processing unit (301), configured to indicate activation and/or deactivation of a protocol data unit session ~~(~~, PDU session~~)~~ , based on configuration signaling sent by a network device,

wherein the processing unit (301) is configured to indicate deactivation of at least one

PDU session to upper layers when the processing unit releases a data radio bearer, DRB, corresponding to an identifier, ID, of a first DRB or DRBs corresponding to IDs of a first group of DRBs based on the configuration signaling such that the at least one PDU session has no DRB associated therewith, wherein the configuration signaling indicates to release the first DRB ID or the first group of DRB IDs.

~~10~~9. The terminal device of claim ~~9~~8, wherein the processing unit (301) is configured to indicate deactivation of a first PDU session or a first group of PDU sessions to the upper layers when the configuration signaling indicates to deactivate the first PDU session or the first group of PDU sessions.

~~11~~10. The terminal device of claim ~~10~~9, wherein the processing unit (301) is further configured to release a ~~data radio bearer (~~DRB~~)~~ associated with the first PDU session or release DRBs associated with the first group of PDU sessions.

~~12. The terminal device of claim 9, wherein the processing unit is configured to indicate deactivation of at least one PDU session to upper layers when the processing unit releases a DRB corresponding to an identifier (ID) of a first DRB or DRBs corresponding to IDs of a first group of DRBs based on the configuration signaling such that the at least one PDU session has no DRB associated therewith, wherein the configuration signaling indicates to release the first DRB ID or the first group of DRB IDs.~~

~~13~~11. The terminal device of claim ~~12~~8, wherein when the configuration signaling further indicates to deactivate of a second PDU session associated with a second DRB corresponding to a second DRB ID, the processing unit is configured to indicate deactivation of the second PDU session to the upper layers, wherein

the second DRB ID is the same as or different from the first DRB ID, and the first DRB ID belongs to the first group of DRB IDs, or the first DRB ID does not belong to the first group of DRB IDs.

~~14~~12. The terminal device of claim ~~9~~8, wherein when the configuration signaling indicates an ID of a second DRB or IDs of a second group of DRBs to be added by the terminal device, and the processing unit (301) adds the DRB corresponding to the second DRB ID or the DRBs corresponding to the second group of DRB IDs as the first DRB(s) of a third PDU session,

the processing unit is configured to indicate activation of the third PDU session to upper layers.

~~15. The terminal device of any of claims 9 to 14, wherein the configuration signaling is a radio resource control (RRC) reconfiguration message.~~

~~16. The terminal device of claim 15, wherein the RRC reconfiguration message comprises a radio bearer configuration.~~

~~17. A terminal device, comprising a processor and a memory for storing a computer program capable of running on the processor, wherein~~

~~the processor is configured to implement steps of the method for indicating protocol data unit session status of any of claims 1 to 8 when the computer program is run.~~

~~18. A storage medium storing an executable program which, when executed by a processor, implements the method for indicating protocol data unit session status of any of claims 1 to 8.~~

13. A method for indicating protocol data unit session status, comprising:

sending, by a network device, configuration signaling to a terminal device, wherein the configuration signaling indicates activation and/or deactivation of a protocol data unit session, PDU session and indicates to release a data radio bearer, DRB, corresponding to an identifier, ID, of a first DRB or DRBs corresponding to IDs of a first group of DRBs,

wherein when the DRB corresponding to the first DRB ID or the DRBs corresponding to the first group of DRB IDs is released based on the configuration signaling such that at least one PDU session has no DRB associated therewith, the configuration signaling further indicates deactivation of the at least one PDU session.

14. The method of claim 13, wherein the configuration signaling indicates to deactivate the first PDU session or the first group of PDU sessions.

15. The method of claim 13, wherein the configuration signaling further indicates to deactivate a second PDU session associated with a second DRB corresponding to a second DRB ID,

wherein the second DRB ID is the same as or different from the first DRB ID, and the first DRB ID belongs to the first group of DRB IDs, or the first DRB ID does not belong to the first group of DRB IDs.

16. The method of claim 13, wherein the configuration signaling indicates an ID of a second DRB or IDs of a second group of DRBs to be added by the terminal device.

17. The method of any one of claims 13 to 16, wherein the configuration signaling is a RRC reconfiguration message.

18. A network device, comprising:

a sending unit, configured to send configuration signaling to a terminal device, wherein the configuration signaling indicates activation and/or deactivation of a protocol data unit session, PDU session and indicates to release a data radio bearer, DRB, corresponding to an identifier, ID, of a first DRB or DRBs corresponding to IDs of a first group of DRBs,

wherein when the DRB corresponding to the first DRB ID or the DRBs corresponding to the first group of DRB IDs is released based on the configuration signaling such that at least one PDU session has no DRB associated therewith, the configuration signaling further indicates deactivation of the at least one PDU session.

19. The network device of claim 18, wherein one of the following applies:

the configuration signaling indicates to deactivate the first PDU session or the first group of PDU sessions; or

the configuration signaling indicates to deactivate a second PDU session associated with a second DRB corresponding to a second DRB ID,

wherein the second DRB ID is the same as or different from the first DRB ID, and the first DRB ID belongs to the first group of DRB IDs, or the first DRB ID does not belong to the first group of DRB IDs.

20. The network device of claim 18, wherein the configuration signaling indicates an ID of a second DRB or IDs of a second group of DRBs to be added by the terminal device.