WHAT IS CLAIMED IS:

A terminal device comprising:

at least one processor; and

at least one memory storing instructions that, when executed by the at least one processor, cause the terminal device at least to:

receive a medium access control (MAC) control element (MAC CE) comprising an octet including multiple fields, wherein the multiple fields indicate a respective activation or deactivation status of multiple channel state information (CSI) report configurations, wherein each CSI report configuration of the multiple CSI report configurations comprises a respective plurality of sub-configurations,

and wherein, if a respective CSI report configuration of the multiple CSI report configurations has an activation status, the MAC CE comprises a respective further octet including at least one further field, wherein the at least one further field indicates an activation or deactivation status of at least one of the plurality of sub-configurations of the respective CSI report configuration;

and if the respective CSI report configuration of the multiple CSI report configurations has a deactivation status, the MAC CE does not comprise the respective further octet; and

determine, if the respective CSI report configuration of the multiple CSI report configurations has an activation status, the activation or deactivation status of the at least one of the plurality of sub-configurations of the respective CSI report configuration at least based on the at least one further field of the MAC CE.

2. The terminal device of claim 1, wherein the terminal device is caused to:

determine if the respective CSI report configuration of the multiple CSI report configurations has an activation status or deactivation status.

3. The terminal device of claim 1 or 2, wherein the terminal device is caused to:

perform CSI measurement using a sub-configuration having an activation status; and

report results of the CSI measurement to the network device.

4. The terminal device of claim 1, wherein the at least one further field indicates an index of a sub-configuration or a set of sub-configurations among the plurality of sub-configurations to activate or deactivate.

5. The terminal device of claim 1, wherein the at least one further field comprises a bitmap for the plurality of sub-configurations, and a bit in the bitmap indicates the activation or deactivation status of a sub-configuration or a set of sub-configurations among the plurality of sub-configurations.

6. The terminal device of claim 1, wherein the at least one further field indicates a number of sub-configurations among the plurality of sub-configurations to activate or deactivate, and wherein the terminal device is caused to determine activation or deactivation of at least one of the plurality of sub-configurations by:

determining an index of the at least one of the plurality of sub-configurations to activate or deactivate based on the indicated number and a defined order of indexes of the plurality of sub-configurations.

7. The terminal device of any of claims 1 to 5, wherein a size of the at least one further field is based on a number of the plurality of sub-configurations or sets of sub-configurations of the CSI report configuration.

8. The terminal device of claim 1, wherein at least one field indicating an activation or deactivation status of the respective CSI report configuration comprises at least one of the following:

at least one reserved bit of the octet;

at least one bit beyond the octet; and

at least one additional octet other than the octet.

9. The terminal device of claim 8, wherein the terminal device is caused to determine activation or deactivation of the at least one of the plurality of sub-configurations of the respective CSI report configuration by:

based on determining that the respective CSI report configuration has a deactivation status, determining deactivation of the plurality of sub-configurations of the respective CSI report configuration.

10. The terminal device of claim 8 or 9, wherein the terminal device is caused to determine activation or deactivation of the at least one of the plurality of sub-configurations by:

based on determining that the respective CSI report configuration has an activation status, determining activation or deactivation of the at least one of the plurality of sub-configurations based on the at least one further field in the MAC CE.

11. The terminal device of any of claims 8 to 10, wherein the terminal device is caused to determine activation or deactivation of the at least one of the plurality of sub-configurations by:

positioning the at least one further field for the CSI report configuration in the MAC CE; and

determining activation or deactivation of the at least one of the plurality of sub-configurations based on a value of the at least one further field.

12. The terminal device of claim 11, wherein the positioning of the at least one further field is at least based on at least one of the following:

the activation or deactivation statuses of the multiple CSI report configurations;

a number of the plurality of sub-configurations or sets of sub-configurations of each of at least one of the multiple CSI report configurations; or

an index or an identity of the CSI report configuration.

13. The terminal device of any of claims 8 to 12, wherein the octet including multiple fields is at least shared between the respective CSI report configuration and another one of the multiple CSI report configurations.

14. The terminal device of any of claims 1 to 12, wherein the terminal device is caused to determine activation or deactivation of at least one of the plurality of sub-configurations by:

determining, based on the at least one further field and a threshold, activation or deactivation of at least one sub-configuration or set of sub-configurations, such that a number of activated sub-configurations or sets of sub-configurations is equal to or less than the threshold.

15. The terminal device of any of claims 1 to 14, wherein the activation or deactivation of at least one of the plurality of sub-configurations indicate that the at least one sub-configuration is applicable or inapplicable respectively.

16. The terminal device of any of claims 1 to 15, wherein a sub-configuration among the plurality of sub-configurations corresponds to or is associated with at least one of the following:

a spatial pattern;

a power level;

an energy level;

a CSI-reference signal (RS) resource;

a CSI-RS resource set;

a resource setting;

a CSI report configuration;

a codebook configuration; or

a CSI triggering state.

17. The terminal device of any of claims 1 to 16, wherein the respective CSI report configuration is for semi-persistent CSI reporting on physical uplink control channel (PUCCH).

18. A network device comprising:

at least one processor; and

at least one memory storing instructions that, when executed by the at least one processor, cause the network device at least to:

generate a medium access control (MAC) control element (MAC CE) comprising an octet including multiple fields, wherein the multiple fields indicate a respective activation status or deactivation status of multiple channel state information (CSI) report configurations, wherein each CSI report configuration of the multiple CSI report configurations comprises a respective plurality of sub-configurations; and wherein, if a respective CSI report configuration of the multiple CSI report configurations has an activation status, the MAC CE comprises a respective further octet including at least one further field, wherein the at least one further field indicates an activation or deactivation

status of at least one of the plurality of sub-configurations of the respective CSI report configuration;

and if the respective CSI report configuration of the multiple CSI report configurations has a deactivation status, the MAC CE does not comprise the respective further octet; and

transmit the MAC CE to a terminal device.

19. The network device of claim 18, wherein the at least one further field indicates an index of a sub-configuration or a set of sub-configurations among the plurality of sub-configurations to activate or deactivate.

20. The network device of claim 18, wherein the at least one further field comprises a bitmap for the plurality of the sub-configurations, and a bit in the bitmap indicates an activation or deactivation status of a sub-configuration or a set of sub-configurations among the plurality of sub-configurations.

21. The network device of claim 18, wherein the at least one further field indicates a number of sub-configurations among the plurality of sub-configurations to activate or deactivate.

22. The network device of any of claims 18 to 21, wherein a size of the at least one further field is based on a number of the plurality of sub-configurations or sets of sub-configurations of the CSI report configuration.

23. The network device of any of claims 18 to 22, wherein at least one field indicating an activation or deactivation status of the respective CSI report configuration comprises at least one of the following:

at least one reserved bit of the octet;

at least one bit beyond the octet; and

at least one additional octet other than the octet.

24. The network device of claim 23, wherein a position of the at least one field in the MAC CE is at least based on at least one of the following:

the activation or deactivation statuses of the multiple CSI report configuration;

a number of the plurality of sub-configurations or sets of sub-configurations of each of at least one of the multiple CSI report configurations; or

an index or an identity of the CSI report configuration.

25. The network of device of any of claims 23 to 24, wherein the at least one field indicating an activation or deactivation status of the respective CSI report configuration is at least shared between the respective CSI report configuration and another one of the multiple CSI report configurations.

26. The network device of any of claims 18 to 25, wherein a sub-configuration among the plurality of sub-configurations corresponds to or is associated with at least one of the following:

a spatial pattern;

a power level;

an energy level;

a CSI-reference signal (RS) resource;

a CSI-RS resource set;

a resource setting;

a CSI report configuration;

a codebook configuration; or

a CSI triggering state.

27. The network device of any of claims 18 to 26, wherein the respective CSI report configuration is for semi-persistent CSI reporting on physical uplink control channel (PUCCH).

28. A method comprising:

receiving, at a terminal device, a medium access control (MAC) control element (MAC CE) comprising an octet including multiple fields, wherein the multiple fields indicate a respective activation or deactivation status of multiple channel state information (CSI) report configurations, wherein each CSI report configuration of the multiple CSI report configurations comprises a respective plurality of sub-configurations

and wherein, if a respective CSI report configuration of the multiple CSI report configurations has an activation status, the MAC CE comprises a respective further

octet including at least one further field, wherein the at least one further field indicates an activation or deactivation status of at least one of the plurality of sub-configurations of the respective CSI report configuration;

and if the respective CSI report configuration of the multiple CSI report configurations has a deactivation status, the MAC CE does not comprise the respective further octet; and

determining, if the respective CSI report configuration of the multiple CSI report configurations has an activation status, activation or deactivation of at least one of the plurality of sub-configurations of the respective CSI report configuration at least based on the at least one field in the MAC CE.

29. A method comprising:

generating, at a network device, a medium access control (MAC) control element (MAC CE) comprising an octet including multiple fields, wherein the multiple fields indicate a respective activation status of deactivation status of multiple channel state information (CSI) report configurations wherein each CSI report configuration of the multiple CSI report configurations comprises a respective plurality of sub-configurations; and wherein, if a respective CSI report configuration of the multiple CSI report configurations has an activation status, the MAC CE comprises a respective further octet including at least one further field, wherein the at least one further field indicates an activation or deactivation status of at least one of the plurality of sub-configurations of the respective CSI report configuration;

and if the respective CSI report configuration of the multiple CSI report configurations has a deactivation status, the MAC CE does not comprise the respective further octet; and

transmitting the MAC CE to a terminal device.

30. An apparatus comprising:

means for receiving, at a terminal device, a medium access control (MAC) control element (MAC CE) comprising an octet including multiple fields, wherein the multiple fields indicate an respective activation or deactivation status of multiple channel state information (CSI) report configurations, wherein each CSI report configuration of the multiple CSI report configurations comprises a respective plurality of sub-configurations;

and wherein, if a respective CSI report configuration of the multiple CSI report configurations has an activation status, the MAC CE comprises a respective further octet including at least one further field, wherein the at least one further field indicates an activation or deactivation status of at least one of the plurality of sub-configurations of the respective CSI report configuration;

and if the respective CSI report configuration of the multiple CSI report configurations has a deactivation status, the MAC CE does not comprise the respective further octet; and

means for determining, if the respective CSI report configuration of the multiple CSI report configurations has an activation status, the activation or deactivation status of at least one of the plurality of sub-configurations of the respective CSI report configuration at least based on the at least one field in the MAC CE.

31. An apparatus comprising:

means for generating, at a network device, a medium access control (MAC) control element (MAC CE) comprising an octet including multiple fields, wherein the multiple fields indicate a respective activation status of deactivation status of multiple channel state information (CSI) report configurations; and wherein, if a respective CSI report configuration of the multiple CSI report configurations has an activation status, the MAC CE comprises a respective further octet including at least one further field, wherein the at least one further field indicates an activation or deactivation status of at least one of the plurality of sub-configurations of the respective CSI report configuration;

and if the respective CSI report configuration of the multiple CSI report configurations has a deactivation status, the MAC CE does not comprise the respective further octet; and

means for transmitting the MAC CE to a terminal device.

32. A non-transitory computer readable medium comprising program instructions that, when executed by an apparatus, cause the apparatus to perform at least:

receiving, at a terminal device, a medium access control (MAC) control element (MAC CE) comprising an octet including multiple fields, wherein the multiple fields indicate an respective activation or deactivation status of multiple channel state information (CSI) report configurations, wherein each CSI report configuration of the multiple CSI report configurations comprises a respective plurality of sub-configurations;

and wherein, if a respective CSI report configuration of the multiple CSI report configurations has an activation status, the MAC CE comprises a respective further octet including at least one further field, wherein the at least one further field indicates an activation or deactivation status of at least one of the plurality of sub-configurations of the respective CSI report configuration;

and if the respective CSI report configuration of the multiple CSI report configurations has a deactivation status, the MAC CE does not comprise the respective further octet; and

determining, if the respective CSI report configuration of the multiple CSI report configurations has an activation status, the activation or deactivation status of at least one of the plurality of sub-configurations of the respective CSI report configuration at least based on the at least one field in the MAC CE.

33. A non-transitory computer readable medium comprising program instructions that, when executed by an apparatus, cause the apparatus to perform at least:

generating, at a network device, a medium access control (MAC) control element (MAC CE) comprising an octet including multiple fields, wherein the multiple fields indicate a respective activation status of deactivation status of multiple channel state information (CSI) report configurations; and wherein, if a respective CSI report configuration of the multiple CSI report configurations has an activation status, the MAC CE comprises a respective further octet including at least one further field, wherein the at least one further field indicates an activation or deactivation status of at least one of the plurality of sub-configurations of the respective CSI report configuration;

and if the respective CSI report configuration of the multiple CSI report configurations has a deactivation status, the MAC CE does not comprise the respective further octet; and

transmitting the MAC CE to a terminal device.