information) is shared and utilized in the context of co-channel coexistence of both LTE SL and NR SL.

[0004] There is thus a need for a communication apparatus and a communication method for sidelink co-channel coexistence resource selection information sharing to solve the above-mentioned issues. Furthermore, other desirable features and characteristics will become apparent from the subsequent detailed description and the appended claims, taken in conjunction with the accompanying drawings and this background of the disclosure.

SUMMARY

[0005] Non-limiting and exemplary embodiments facilitate providing communication apparatuses and communication methods for multi-link traffic indication map.

[0005a] In an aspect, the present disclosure refers to a first communication apparatus, comprising: circuitry, which, in operation, determines a first plurality of resources used for new radio (NR) sidelink communication based on information relating to a long-term evolution (LTE) sidelink communication, wherein the information is a Reference Signal Received Power (RSRP) threshold determined based on shared information of the LTE sidelink communication; and a transceiver, which, in operation, reports the first plurality of resources to higher layer(s).

[0005b] In an aspect, the present disclosure refers to a communication method performed by a first communication apparatus, comprising: determining a first plurality of resources used for new radio (NR) sidelink communication based on information relating to a long-term evolution (LTE) sidelink communication, wherein the information is a Reference Signal Received Power (RSRP) threshold determined based on shared information of the LTE sidelink communication; and reporting the first plurality of resources to higher layer(s).

[0005c] In an aspect, the present disclosure refers to an integrated circuit, comprising: determination circuitry, which in operation, controls a determination of a first plurality of resources used for new radio (NR) sidelink communication based on information relating to a long-term evolution (LTE) sidelink communication, wherein the information is a Reference Signal Received Power (RSRP) threshold determined based on shared information of the LTE sidelink communication; and report circuitry, which in operation, controls of a report of the first plurality of resources to higher layer(s).

[0006] In a first example, the present disclosure provides a first communication apparatus, comprising: a first module, which, in operation, is configured to select a list of first resources from a first plurality of candidate resources based on information relating to one or more resources of a second plurality of candidate resources received from a second module; and a transceiver, which, in operation, transmits to and/or receive from another communication apparatus a signal in one of the list of first resources

[0007] In a second example, the present disclosure provides a second communication apparatus, comprising: a second module, which, in operation, is configured to select a list of second resources from a second plurality of candidate resources; and a transceiver, which, in

operation, transmits a signal comprising information relating to the list of second resources to a first

CLAIMS

1. A first communication apparatus, comprising:

circuitry, which, in operation, determines a first plurality of resources used for new radio (NR) sidelink communication based on information relating to a long-term evolution (LTE) sidelink communication, wherein the information is a Reference Signal Received Power (RSRP) threshold determined based on shared information of the LTE sidelink communication; and

a transceiver, which, in operation, reports the first plurality of resources to higher layer(s).

2. The first communication apparatus of claim 1, wherein the first plurality of resources is determined from a first plurality of candidate resources by excluding one or more resources based on the information.

3. The first communication apparatus of claim 2, wherein the first plurality of candidate resources is overlapped with a second plurality of candidate resources used for the LTE sidelink communication.

4. The first communication apparatus of claim 1, wherein the information is transmitted from another communication apparatus.

5. The first communication apparatus of claim 1, wherein the information is used for excluding one or more resources.

6. The first communication apparatus of claim 1, wherein a priority relating to the RSRP of the LTE sidelink communication is different from a priority relating to the RSRP of the New Rat (NR) sidelink communication.

7. A communication method performed by a first communication apparatus, comprising:

determining a first plurality of resources used for new radio (NR) sidelink communication based on information relating to a long-term evolution (LTE) sidelink communication, wherein the information is a Reference Signal Received Power (RSRP) threshold determined based on shared information of the LTE sidelink communication; and

reporting the first plurality of resources to higher layer(s).

8. The communication method of claim 1, wherein the first plurality of resources is determined from a first plurality of candidate resources by excluding one or more resources based on the information.

9. The communication method of claim 2, wherein the first plurality of candidate resources is overlapped with a second plurality of candidate resources used for the LTE sidelink communication.

10. The communication method of claim 1, wherein the information is transmitted from another communication apparatus.

11. The communication method of claim 1, wherein the information is used for excluding one or more resources.

12. The communication method of claim 1, wherein a priority relating to the RSRP of the LTE sidelink communication is different from a priority relating to the RSRP of the New Rat (NR) sidelink communication.

13. An integrated circuit, comprising:

determination circuitry, which in operation, controls a determination of a first plurality of resources used for new radio (NR) sidelink communication based on information relating to a long-term evolution (LTE) sidelink communication, wherein the information is a Reference Signal Received Power (RSRP) threshold determined based on shared information of the LTE sidelink communication; and

report circuitry, which in operation, controls of a report of the first plurality of resources to higher layer(s).