[7] In a first aspect, the present disclosure provides a first communication apparatus comprising: circuitry, which, in operation, generates a request frame comprising a plurality of parameters to be used by a second communication apparatus to select one or more links, each of the one or more links attached to one or more sensing responders; a transmitter, which, in operation, transmits the request frame to the second communication apparatus to request the second communication apparatus to perform a measurement on the one or more links; and a receiver, which, in operation, receives a report frame from the second communication apparatus, the report frame carrying one or more sensing reports corresponding to the one or more sensing responders, wherein, prior to receiving the report frame, the receiver further receives a validation request frame to request for verification information indicating that the first communication apparatus is authorized to receive the one or more sensing reports; the circuitry is configured to process the validation request frame and generate a validation response frame comprising the verification information; and the transmitter transmits the validation response frame comprising verification information generated based on the validation request frame.

[8] In a second aspect, the present disclosure provides a second communication apparatus: a receiver, which, in operation, receives a request frame from a first communication apparatus, the request frame comprising a plurality of parameters to be used to select one or more links, each of the one or more links attached to one or more sensing responders; circuitry, which, in operation, is configured to generate a report frame carrying one or more sensing reports corresponding to the one or more sensing responders; and a transmitter, which, in operation, transmits the report frame to the first communication apparatus, the report frame carrying one or more sensing reports corresponding to the one or more sensing responders, wherein the receiver receives a validation request frame from one of the one or more sensing responders to request for verification information indicating that the first communication apparatus is authorized to receive a measurement report from the one of the one or more sensing responders, and the transmitter transmits the validation request frame to the first communication apparatus; subsequently, the receiver further receives a validation response frame comprising the verification information from the first communication apparatus; and the transmitter transmits the validation response frame to the one of the one or more sensing responders.

[9] In a third aspect, the present disclosure provides a communication method implemented by a first communication apparatus comprising: generating a request frame comprising a plurality of parameters to be used by a second communication apparatus to select one or more links, each of the one or more links attached to one or more sensing responders; transmitting the request frame to the second communication apparatus to request the second communication apparatus to perform a measurement on the one or more links; and receiving a report frame, from the second communication apparatus, the report frame carrying one or more sensing reports corresponding to the one or more sensing responders; the method further comprising: receiving, prior to receiving the report frame, a validation request frame to request for verification information indicating that the first communication apparatus is authorized to receive the one or more sensing reports; processing the validation request frame; generating a validation response frame comprising the verification information; and transmitting the validation response frame comprising verification information generated based on the validation request frame.

[10] In a fourth aspect, the present disclosure provides a communication method implemented by a second communication apparatus comprising: receiving a request frame from a first communication apparatus, the request frame comprising a plurality of parameters to be used to select one or more links, each of the one or more links attached to one or more sensing responders; generating a report frame carrying one or more sensing reports corresponding to the one or more sensing responders; and transmitting the report frame to the first communication apparatus, the report frame carrying one or more sensing reports corresponding to the one or more sensing responders; the method further comprising: receiving a validation request frame from one of the one or more sensing responders to request for verification information indicating that the first communication apparatus is authorized to receive a measurement report from the one of the one or more sensing responders; transmitting the validation request frame to the first communication apparatus; subsequently, receiving a validation response frame comprising the verification information from the first communication apparatus; and transmitting the validation response frame to the one of the one or more sensing responders.

CLAIMS

1. A first communication apparatus comprising:

circuitry, which, in operation, generates a request frame including a plurality of parameters to be used by a second communication apparatus to select one or more links, each of the one or more links attached to one or more sensing responders;

a transmitter, which, in operation, transmits the request frame to the second communication apparatus to request the second communication apparatus to perform a measurement on the one or more links; and

a receiver, which, in operation, receives a report frame from the second communication apparatus, the report frame carrying one or more sensing reports corresponding to the one or more sensing responders,

wherein, prior to receiving the report frame, the receiver further receives a validation request frame to request for verification information indicating that the first communication apparatus is authorized to receive the one or more sensing reports; the circuitry is configured to process the validation request frame and generate a validation response frame comprising the verification information; and the transmitter transmits the validation response frame comprising verification information generated based on the validation request frame.

2. The first communication apparatus of claim 1, wherein the plurality of parameters include at least one of a link related parameter, a device related parameter, a number of links to be selected, a condition on whether a responder-to-responder (R2R) link can be selected, and a condition whether a link attached to the first communication apparatus can be selected.

3. The first communication apparatus of claim 2, wherein the link related parameter is at least one of a Received Signal Strength Indicator and a Received Channel Power Indicator received on a link, and the device related parameter is at least one of a device type, a device location, a device identifier and a device address.

4. The first communication apparatus of claim 1, wherein the report frame carries ID information for identifying each of the one or more links corresponding to the one or more sensing responders.

5. The first communication apparatus of claim 4, wherein, prior to receiving the report frame, the receiver receives a response frame from the second communication apparatus carrying the ID information for identifying each of the one or more links.

6. The first communication apparatus of claim 1, wherein the request frame further indicates whether the one or more sensing reports carried in the report frame comprises a report of a measurement on a link to which the first communication apparatus is attached.

7. The first communication apparatus of claim 1, wherein the request frame is a Sensing By Proxy (SBP) Request frame; the response frame is an SBP Response frame and the measurement is a sensing measurement; and the report frame is an SBP Report frame.

8. The first communication apparatus of claim 1, wherein the first communication apparatus and the one or more sensing responders are non-access-point (non-AP) stations and the second communication apparatus is an access point.

9. A second communication apparatus comprising:

a receiver, which, in operation, receives a request frame from a first communication apparatus, the request frame including a plurality of parameters to be used to select one or more links, each of the one or more links attached to one or more sensing responders;

circuitry, which, in operation, is configured to generate a report frame carrying one or more sensing reports corresponding to the one or more sensing responders; and

a transmitter, which, in operation, transmits the report frame to the first communication apparatus, the report frame carrying one or more sensing reports corresponding to the one or more sensing responders,

wherein the receiver receives a validation request frame from one of the one or more sensing responders to request for verification information indicating that the first communication apparatus is authorized to receive a measurement report from the one of the one or more sensing responders, and the transmitter transmits the validation request frame to the first communication apparatus; subsequently, the receiver further receives a validation response frame comprising the verification information from the first communication apparatus; and the transmitter transmits the validation response frame to the one of the one or more sensing responders.

10. The second communication apparatus of claim 9, wherein the circuitry, in operation, selects the one or more links based on the plurality of parameters.

11. The second communication apparatus of claim 9, wherein, prior to transmitting the report frame, the circuitry is configured to generate a setup request frame for each of the one or more third communication apparatuses to setup the measurement on the each of the one or more sensing responders, the setup request frame comprising an identifier of or an address of the first communication apparatus; and the transmitter transmits the setup request frame to the each of the one or more third communication apparatuses.

12. The second communication apparatus of claim 9, wherein the validation request frame and the validation response frame carry an identifier of or an address of each of the first communication apparatus and the one of the one or more third communication apparatuses.

13. The second communication apparatus of claim 9, wherein the report frame carries ID information for identifying each of the one or more links corresponding to the one or more sensing responders.

14. The second communication apparatus of claim 13, wherein the circuitry is configured to assign a different setup identifier to each of the one or more links, and generate a response frame subsequent to receiving the request frame comprising the different setup identifier assigned to the each of the one or more links; and the information carried in the report frame comprises the different setup identifier assigned to the each of the one or more links.

15. The second communication apparatuses of claim 9, wherein the request frame is a Sensing By Proxy (SBP) Request frame; the response frame is an SBP Response frame and the measurement is a sensing measurement; and the report frame is an SBP Report frame.

16. The second communication apparatus of claim 9, wherein the first communication apparatus and the one or more sensing responders are non-access-point (non-AP) stations and the second communication apparatus is an access point.

17. A communication method implemented by a first communication apparatus comprising:

generating a request frame including a plurality of parameters to be used by a second communication apparatus to select one or more links, each of the one or more links attached to one or more sensing responders;

transmitting the request frame to the second communication apparatus to request the second communication apparatus to perform a measurement on the one or more links; and

receiving a report frame, from the second communication apparatus, the report frame carrying one or more sensing reports corresponding to the one or more sensing responders;

the method further comprising: receiving, prior to receiving the report frame, a validation request frame to request for verification information indicating that the first communication apparatus is authorized to receive the one or more sensing reports; processing the validation request frame; generating a validation response frame

comprising the verification information; and transmitting the validation response frame comprising verification information generated based on the validation request frame.

18. A communication method implemented by a second communication apparatus comprising:

receiving a request frame from a first communication apparatus, the request frame including a plurality of parameters to be used to select one or more links, each of the one or more links attached to one or more sensing responders;

generating a report frame carrying one or more sensing reports corresponding to the one or more sensing responders; and

transmitting the report frame to the first communication apparatus, the report frame carrying one or more sensing reports corresponding to the one or more sensing responders;

the method further comprising: receiving a validation request frame from one of the one or more sensing responders to request for verification information indicating that the first communication apparatus is authorized to receive a measurement report from the one of the one or more sensing responders; transmitting the validation request frame to the first communication apparatus; subsequently, receiving a validation response frame comprising the verification information from the first communication apparatus; and transmitting the validation response frame to the one of the one or more sensing responders.