CLAIMS

1. A receiver system for receiving a transmitted signal via a long-range link, the system comprising:

a plurality of interconnected devices in a short-range network, the plurality of devices including at least one main device and one or more assisting devices, the at least one main device and the one or more assisting devices each configured to receive the transmitted signal via the long-range link;

wherein the one or more assisting devices are configured to transmit a relayed signal representing the received transmitted signal at the assisting device to the at least one main device via the short-range network;

wherein the at least one main device is configured to generate output data representing the content of the transmitted signal based on the transmitted signal received at the at least one main device and the one or more relayed signals received from the one or more assisting devices; and

wherein the at least one main device is configured to identify associated ones amongst a group consisting of the received relayed signals from the one or more assisting devices and the transmitted signal received at the at least one main device, wherein identifying the associated ones amongst the received relayed signals from the one or more assisting devices and the transmitted signal received at the at least one main device comprises comparing timestamps of packets to identify all such packets which correspond to a single packet transmitted from the transmitter and received by the one or more assisting devices and the at least one main device.

2. The system of claim 1, wherein the short-range network is heterogenous.

3. The system of claims 1 or 2, wherein the at least one main device is configured to process the associated signals to generate the output data.

4 The system of any one of the preceding claims, wherein the one or more assisting devices are configured to be capable of functioning as a main device.

5. The system of any one of the preceding claims, wherein the at least one main device is configured to be capable of functioning as an assisting device.

6. The system of any one of the preceding claims, wherein the at least one main device and the one or more assisting devices are configured to perform packet detection on the received transmitted signal.

7. The system of claim 6, wherein the at least one main device and the one or more assisting devices are configured to perform signal capture on the received transmitted signal triggered by detecting a packet in the received transmitted signal.

8. The system of claim 7, wherein the at least one main device and the one or more assisting devices are configured to perform pre-processing on the captured signal.

9. The system of any one of the preceding claims, wherein the one or more assisting devices are configured to transmit the relayed signal to the at least one main device only if a signal-to-noise ratio in the received transmitted signal at the assisting device meets a threshold.

10. A method for receiving a transmitted signal via a long-range link, the method comprising the steps of:

providing a plurality of interconnected devices in a short-range network, the plurality of devices including at least one main device and one or more assisting devices;

the at least one main device and the one or more assisting devices each receiving the transmitted signal via the long-range link;

the one or more assisting devices transmitting a relayed signal representing the received transmitted signal at the assisting device to the at least one main device via the short-range network; and

the at least one main device generating output data representing the content of the transmitted signal based on the transmitted signal received at the at least one main device and the one or more relayed signals received from the one or more assisting devices;

wherein the at least one main device identifies associated ones amongst a group consisting of the received relayed signals from the one or more assisting devices and the transmitted signal received at the at least one main device; and

identifying the associated ones amongst the received relayed signals from the one or more assisting devices and the transmitted signal received at the at least one main device comprises comparing timestamps of packets to identify all such packets which correspond to a single packet transmitted from the transmitter and received by the one or more assisting devices and the at least one main device.

11. The method of claim 10, wherein the short-range network is heterogenous.

12. The method of claims 10 or 11, wherein the at least one main device processes the associated signals to generate the output data.

13. The method of any one of claims 10 to 12 wherein the one or more assisting devices are capable of functioning as a main device.

14. The method of any one of claims 10 to 13, wherein the at least one main device is capable of functioning as an assisting device.

15. The method of any one of claims 10 to 14, wherein the at least one main device and the one or more assisting devices perform packet detection on the received transmitted signal.

16. The method of claim 15, wherein the at least one main device and the one or more assisting devices perform signal capture on the received transmitted signal triggered by detecting a packet in the received transmitted signal.

17. The method of claim 16, wherein the at least one main device and the one or more assisting devices perform pre-processing on the captured signal.

18. The method of any one of claims 10 to 17, wherein the one or more assisting devices transmit the relayed signal to the at least one main device only if a signal-to-noise ratio in the received transmitted signal at the assisting device meets a threshold.