CLAIMS.

1. A Distributed Antenna System (DAS) comprising:

a first digital remote unit (DRU) in communication with a mobile device, the first DRU including a first antenna;

a second DRU in communication with the mobile device, the second DRU including a second antenna;

a third DRU in communication with the mobile device, the third DRU including a third antenna;

a digital access unit (DAU) configured to route signals to and from the first DRU, the second DRU, and the third DRU via optical connections; and

a server computer communicatively coupled to the DAU, the server computer comprising:

a processor; and

a memory coupled to the processor, the memory storing instructions, executable by the processor, to perform:

collecting, at each DRU, a timed snapshot of traffic data, the timed snapshot including a block of traffic data and a timestamp indicating a time at which the timed snapshot was taken;

collecting, from the DAU, a first key performance indicator (KPI) data for the mobile device relative to the first DRU, wherein the first KPI data comprises at least one of a first power level or a first transmission time and the first KPI data is extracted from control channel information in the timed snapshot,

obtaining, from the DAU, a first location of the first DRU,

collecting, from the DAU, a second KPI data for the mobile device relative to the second DRU, wherein the second KPI data comprises at least one of a second power level or a second transmission time and the second KPI data is extracted from control channel information in the timed snapshot,

obtaining, from the DAU, a second location of the second DRU,

collecting, from the DAU, a third KPI data for the mobile device relative to the third DRU, wherein the third KPI data comprises at least one of a third power level or a third

transmission time and the third KPI data is extracted from control channel information in the timed snapshot,

obtaining, from the DAU, a third location of the third DRU, and

determining a geolocation of the mobile device using the first location and at least one of the first power level or the first transmission time, the second location and at least one of the second power level or the second transmission time, and the third location and at least one of the third power level or the third transmission time.

2. The system of claim 1, wherein the instructions further comprise:

obtaining an identifier associated with the mobile device; and

transmitting the identifier and the geolocation to an emergency responder system.

3. The system of claim 1, wherein the first KPI data, the second KPI data and the third KPI data are collected from at least one control channel including one or more of a PDCCH for uplink or a PUCCH for downlink.

4. The system of claim 1, wherein the geolocation of the mobile device is determined using a triangulation algorithm.

5. The system of claim 1, further comprising:

at least one base transceiver station (BTS) coupled to the DAU.

6. The system of claim 1, wherein the first DRU, the second DRU and the third DRU are coupled to a DAU of a plurality of DAUs in a star configuration.

7. The system of claim 1, wherein the first DRU, the second DRU and the third DRU are coupled to a DAU of a plurality of DAUs in a loop.

8. The system of claim 1, wherein the first DRU, the second DRU and the third DRU are connected to each other in a daisy chain configuration.

9. The system of claim 1, further comprising:

at least one digital expansion unit (DEU) coupled to the first DRU, the second DRU, and the third DRU, wherein at least one DAU is coupled to the at least one DEU.

10. The system of claim 1, wherein the DAU is configured to capture a time-synchronized snapshot relative to one or more of the first, second, and third DRUs, the time-synchronized snapshot comprising at least one of a user identification number, DRU identification number and, a transmission timestamp.

11. The system of claim 1, wherein:

the first KPI data comprises the first transmission time;

the second KPI data comprises the second transmission time; and

the third KPI data comprises the third transmission time.

12. The system of claim 1, wherein the geolocation of the mobile device is determined using at least one of a time delay of arrival technique and a time difference of arrival technique.

13. The method of claim 1, wherein the geolocation of the mobile device is determined using at least one of a time delay of arrival technique and a time difference of arrival technique.

14. A method for determining a geolocation of a mobile device in a Distributed Antenna System (DAS), the method comprising:

collecting, at each Digital Remote Unit (DRU), a timed snapshot of traffic data, the timed snapshot including a block of traffic data and a timestamp indicating a time at which the timed snapshot was taken;

collecting, from a digital access unit (DAU), a first key performance indicator (KPI) data for the mobile device relative to a first digital remote unit (DRU), wherein the first DRU includes a first antenna and is in communication with the DAU via a first optical connection, and wherein the first KPI data comprises at least one of a first power level or a first transmission time and the first KPI data is extracted from control channel information in the timed snapshot;

obtaining, from the DAU, a first location of the first DRU;

collecting, from the DAU, a second KPI data for the mobile device relative to a second DRU, wherein the second DRU includes a second antenna and is in communication with the DAU via a second optical connection, and wherein the second KPI data comprises at least one of a second power level or a second transmission time and the second KPI data is extracted from control channel information in the timed snapshot;

obtaining, from the DAU, a second location of the second DRU;

collecting, from the DAU, a third KPI data for the mobile device relative to a third DRU, wherein the third DRU includes a third antenna and is in communication with the DAU via a third optical connection, and wherein the third KPI data comprises at least one of a third power level or a third transmission time and the third KPI data is extracted from control channel information in the timed snapshot;

obtaining, from the DAU, a third location of the third DRU; and

determining the geolocation of the mobile device using the first location and at least one of the first power level or the first transmission time, the second location and at least one of the second power level or the second transmission time, and the third location and at least one of the third power level or the third transmission time.

15. The method of claim 14, further comprising:

obtaining an identifier associated with the mobile device; and

transmitting the identifier and the geolocation to an emergency responder system.

16. The method of claim 14, wherein the first KPI data, the second KPI data and the third KPI data are collected from at least one control channel including one or more of a PDCCH for uplink or a PUCCH for downlink.

17. The method of claim 14, wherein the geolocation of the mobile device is determined using a triangulation algorithm.

18. The method of claim 14, wherein the DAU is coupled to at least one base transceiver station (BTS).

19. The method of claim 14, wherein the first DRU, the second DRU and the third DRU are coupled to the DAU in a star configuration.

20. The method of claim 14, wherein the first DRU, the second DRU and the third DRU are coupled to the DAU in a loop.

21. The method of claim 14, wherein the first DRU, the second DRU and the third DRU are connected to each other in a daisy chain configuration.

22. The method of claim 14, wherein the first DRU, the second DRU and the third DRU are coupled to at least one digital expansion unit (DEU), and wherein the at least one DEU is coupled to the DAU.

23. The method of claim 14, wherein:

the first KPI data comprises the first transmission time;

the second KPI data comprises the second transmission time; and

the third KPI data comprises the third transmission time.