**Gateway**

**Gateway**

**Coordinator**

**Coordinator**

**Coordinator**

**Coordinator**

**Coordinator**

**Coordinator Layer**

**Gateway**

**Gateway Layer**

Base Station

**Sink/Base station Layer**

Wireless Transmission

**LoRa Coordinator**

**End Node device1**

**End Node device2**

**End Node device3**

**End Node device’n’**

Cluster A

**LoRa Gateways**

Cluster C

Cluster D

Cluster E

Cluster B

Cluster F

Applications

Base Station

**USB**

**Database**

**LoRa Gateway**

**Computer/Server**

**GUI**

**Server Application**

**GSM Module**

Applications

**Mobile Service**

**USB/RS232**

**GSM Network**

