LoRaWAN vs NB-IoT

Table 5. NB-IoT vs. LoRaWAN average power consumption, latency, and throughput.

Features	NB-IoT	LoRaWAN
Joining network	3 mAh	1 mAh
Uplink message (44 bytes)	1.8 mAh	100 µAh
UE class	Cat NB1	A
Data rate (20 bytes)	0.6–4 bps	
Frequency	28 Mhz	EU868 MHz

The Things Network

- Built in a crowdsourced manner by companies and enthusiasts
  - Low density coverage, mostly in larger cities (5 GW in Aveiro)
  - 1-2Km range in cities, 10km in open space

- Provides a Free connectivity service, and broker with APIs

- Composed by:
  - Nodes: owned by companies and citizens, send data to Gateways
  - Gateways: owned by companies and citizens, interface with TTN
  - TTN Servers: Hosted by TTN, routing data to/from user apps