# sigfox

Group 3: Ragul, Xing Yi, James, Song Gee


**Sigfox → LPWAN**

# Data Rate/Range

| | |
|---|---|
| Latency | Few seconds after emission |
| Range | 10km in urban setting<br>40km in rural setting |
| Bandwidth | Each message 100Hz wide<br>Transferred at 100 or 600 bps |

# Power Use/Spectrum

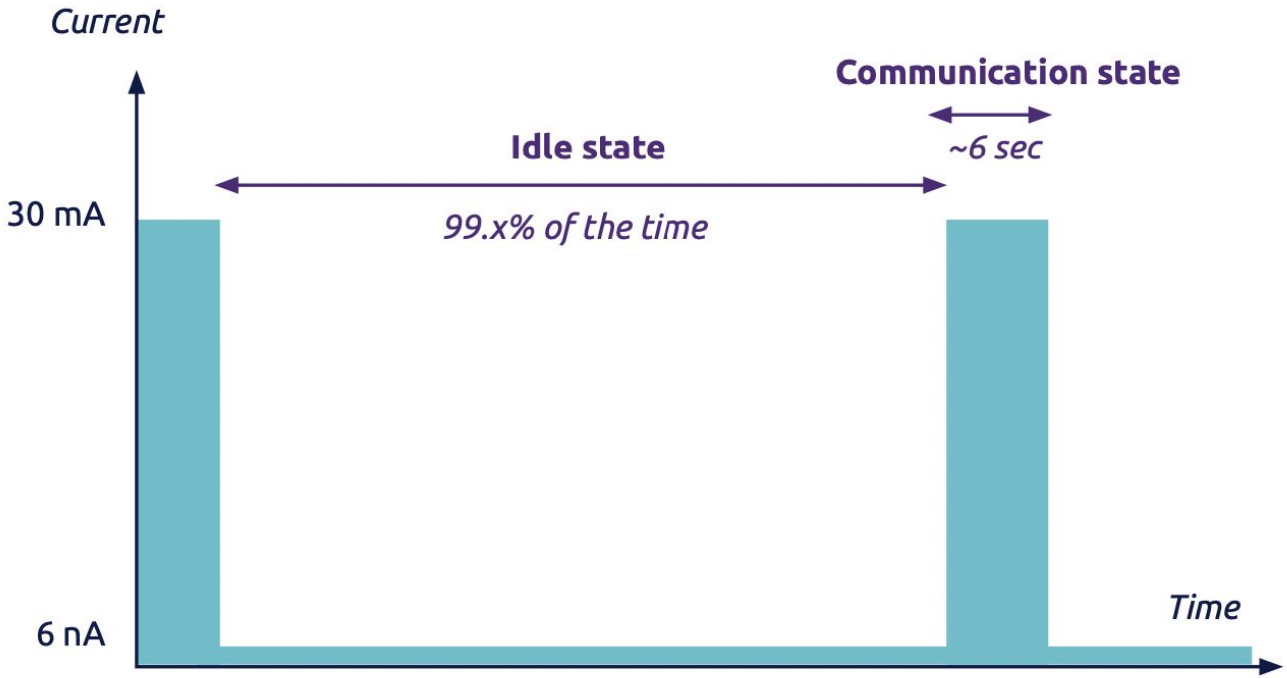
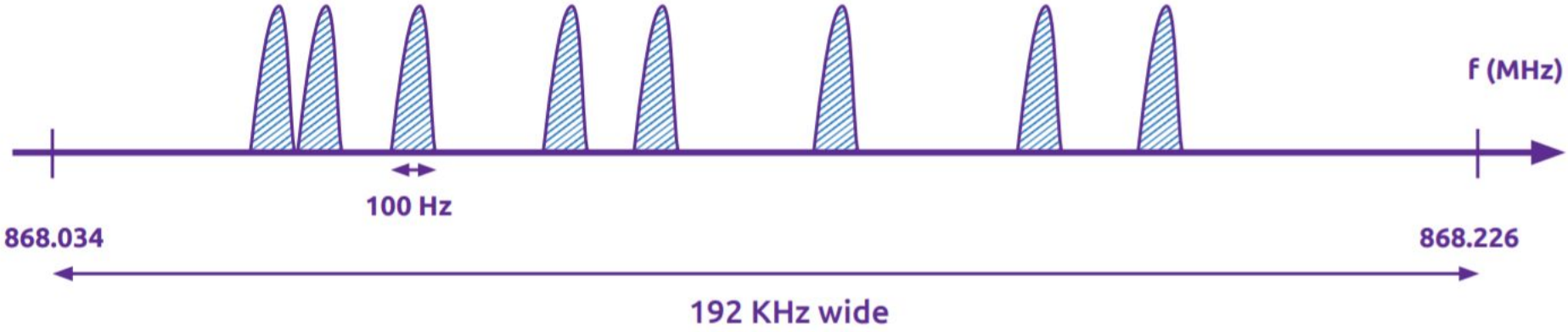



*Figure 10: Low idle consumption increasing the battery life*

# Power Use/Spectrum

- Ultra-Narrow Band
  - Between 868 and 868.2 MHz in Europe
  - Between 902 and 928 MHz in the rest of the world (depending on local regulations/restrictions)



# Applications/Stakeholders

- Sigfox tech aimed at providing **long range, low power & data rate** IoT connectivity where **wide area coverage** is needed
  - Home and consumer goods
  - Energy related communications - in particular smart metering
  - Healthcare - in particular the mobile health applications that are starting to be developed
  - Transportation - this can include the automotive management
  - Remote monitoring and control (farms)
  - Retail including point of sale, shelf updating, etc
  - Security
- Stakeholders
  - **Investors:** Intel, Samsung, SalesForce, NTT, SKTelecom
  - **Users:** STMicroelectronics, Texas Instruments, Atmel (sell Sigfox modems)

# Open/Proprietary

Uses proprietary technology,

But allows open source implementations

# Mobility Support

- Constrained within Sigfox's network coverage area
- Since technology is proprietary, cannot set up beacons ourselves

# Simple Comparison

Sigfox is proprietary and requires a subscription to the Sigfox network,

NB-IoT, LTE-Cat M still need something like SingTel but allows many vendors,

LoRa is completely free market bro.

# Summary

| | | |
|---|---|---|
| 100/600 bps,<br>10-40km range | 30mA / 6nA,<br>868MHz, 902-928MHz | Home, Energy,<br>Healthcare,<br>Transportation |
| Proprietary | Only works in<br>areas with Sigfox | Most Proprietary,<br>maybe that's why… |

# Sadfox :(

## IoT startup Sigfox files for insolvency

Slow adoption and Covid-19 supply chain issues impacting company

February 01, 2022 By: Dan Swinhoe Comment