

Sigfox 0G Network

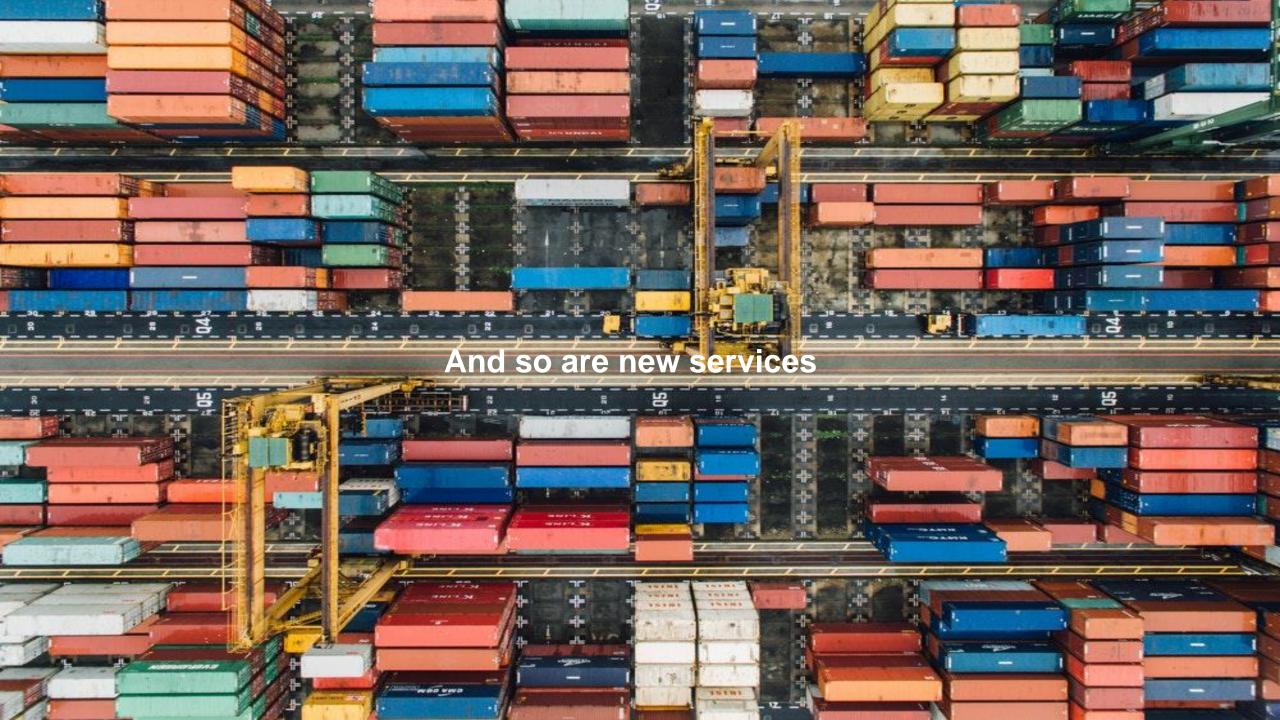
Paris le 8 octobre 2019

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Reducing costs, losses are critical to large corporations and industries success





Each corner of the planet shall be reachable

We launched Sigfox in 2010 to connect any object surrounding us

with 3 pillars...

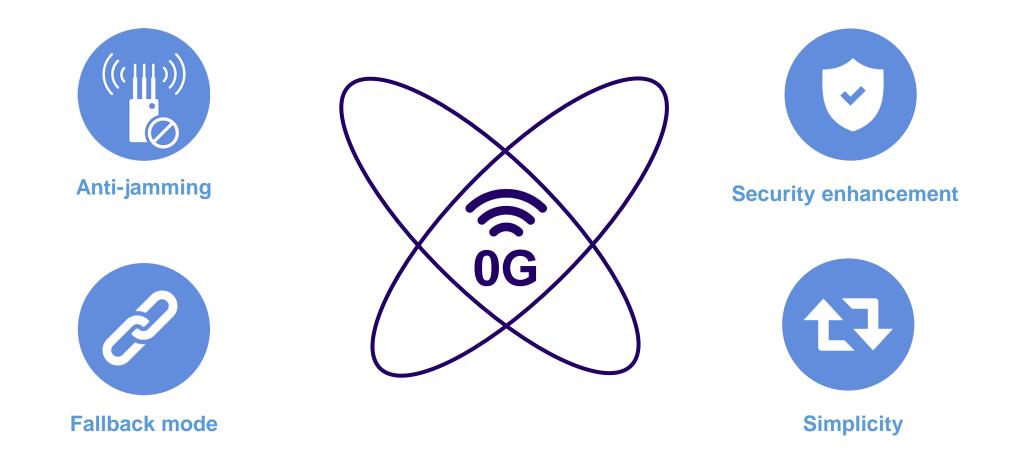
Low overall TCO

low energy

global

...which are key characteristics of Sigfox 0G network

Other key characteristics that make Sigfox 0G unique





We bring value to our customers enabling business transformation to...



Increase operational efficiency



Create new revenue streams



... for all their use cases

Assets management and tracking Freight monitoring Smart building management Office management Smart metering Infrastructure monitoring **Preventive maintenance** Customer satisfaction Security Stolen vehicle recovery





Track automotive packaging to optimize logistic loop & usage





BENEFITS

Hanufacturer

COST OF HANDLING

UTILISATION

LOST

Reduce handling error Increase container availability Reduce packaging loss per year



Indoor air quality monitoring

Problem solved

Improve the air quality

Solution

Monitor the CO2 level, its ambient temperature and the ambient relative humidity.

Benefits

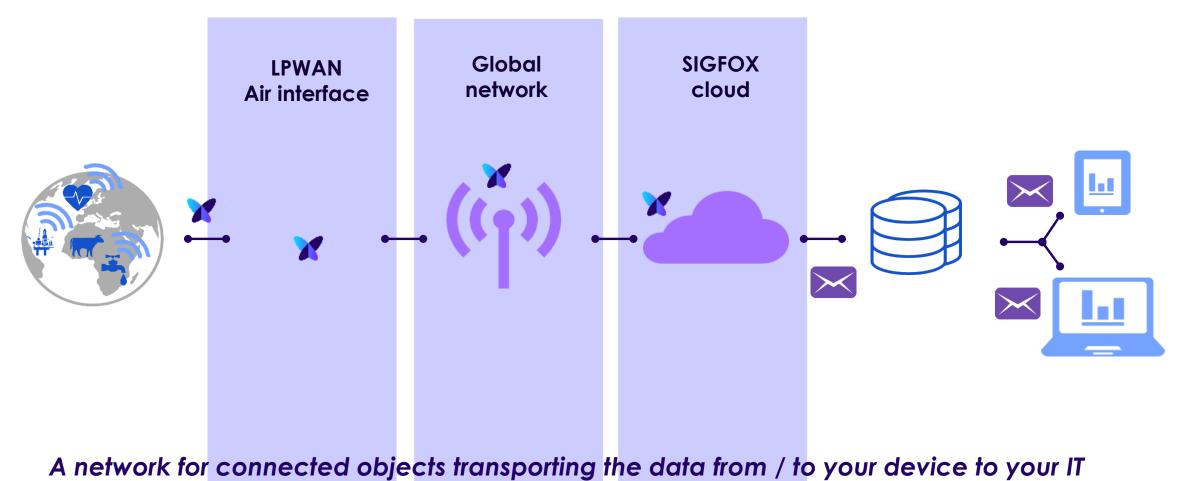
- Regulatory compliance for buildings (public or private school, nursery, ...)
- Market Ma
- Wentilation systems







What we provide



systems



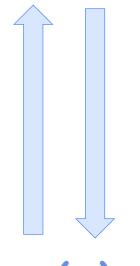




UPLINK 12-Byte payload

- Sensor data
- Event status
- GPS fix
- Application data

1 % duty cycle for Objects Up to 6 messages/hour



((p)) ..._

DOWNLINK 8-Byte payload

- Action / actuator trigger
- Device management
- Application parameter setting

10 % duty cycle for Base Stations4 guaranteed downlink msg/day



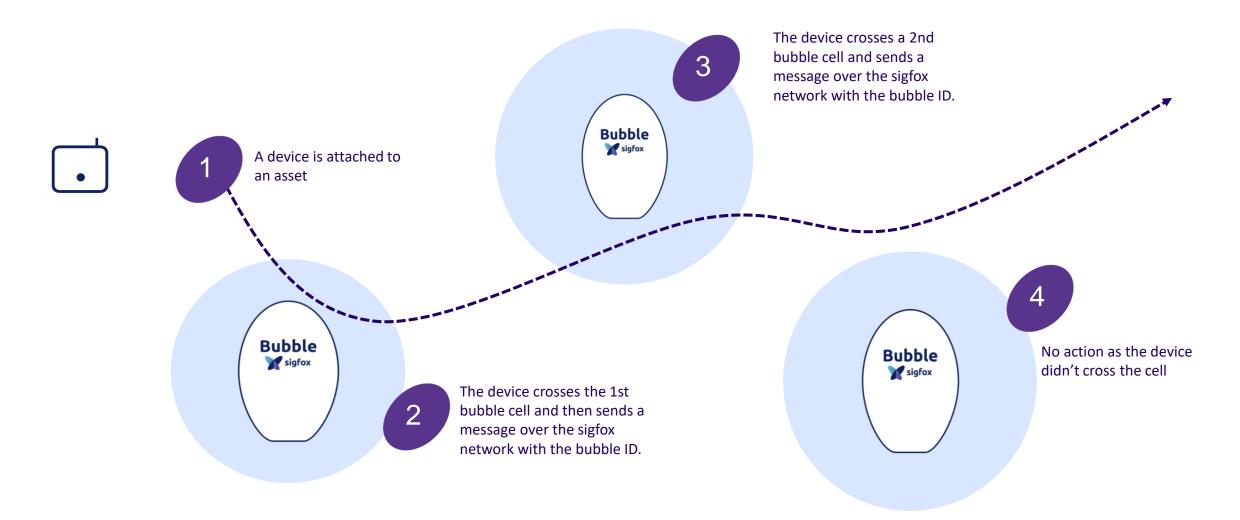
Sigfox is not only about connectivity...

...it's also :

- Monarch, enabling nomadic devices to travel the world
- A partnership with Eutelsat to enable IoT with satellites
- Partnership or joint ventures with companies such as Michelin
- A beaconing solution
- Consultancy services to support you from use case definition to industrialization



The Bubble, Sigfox beaconing solution





Bubble IDs are mapped to geo coordinates in the Sigfox Bubble cloud enabling the geolocation of the device

Implementing IoT into your business is...

- core business processes.
- All about ma
 - mastering the Rol
 - business transformation





We help our customers thinking IoT



Transforming a business Idea





Into a complete usecase definition







Framing Solution Design



... integrating IoT



Proof of value integrating operationnal process



A

Design to cost HW

Tailored Logic

Platform & Apps

Performance Improvement & Assistance









Right what is needed



Ready to scale

Design & Industrialisation



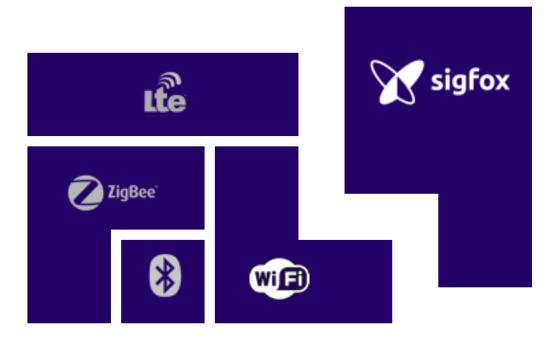
Screening Sourcing Partnership



Sales & Delivery



... connecting IoT



Complements other Connectivity Technologies

The use case dictates the technology/ies to be used





<u>Sigfox.com</u> for general and coverage information

<u>Partners.sigfox.com</u> for existing solutions ranging from RF modules to application platforms

<u>Resources.sigfox.com</u> to access useful documentation and ask questions

<u>Build.sigfox.com</u> a guide for building a device from design to industrialization







Bubble

Proximity detection relying on the Bubble, the Sigfox beaconing solution

Step 4

BUBBLE DATABASE

Sends location through Relays the bubble ID and potentially advanced callback or API sensor data to the Sigfox network Step 1 Location service Detects its SIGFOX CLOUD based on the proximity with DEVICE (BUBBLE CLOUD) a bubble and proximity detection of understands a nearby Bubble by a how it should **BUBBLE ID** LOCATION + SENSOR DATA Sigfox device. + SENSOR DATA behave 00 Very high accuracy (below 10m, BUBBLE ID Step 3 configurable) in both Bubble Recognizes frame M sigfox indoor and outdoor and sends it to the Bubble database (close to buildings) environments. (() () Translates Bubble ID into location information

Step 2



CUSTOMER IT

~"|||