



**THE GLOBAL CELLULAR NETWORK DEDICATED
TO SMALL MESSAGES FOR THE IOT**

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CHIEF OPERATING OFFICER



THE INTERNET OF
THINGS WILL BE
THE INTERNET OF
EVERYTHING



\$ 3,2 BILLION

GOOGLE BUYS NEST FOR \$ 3,2 BILLION TO
BUILD A STRONG TEAM FOR THE INTERNET
OF THINGS."



\$ 19 TRILLION

INTERNET OF THINGS IS A \$ 19 TRILLION
OPPORTUNITY."



1,5 TRILLION DEVICES

THERE ARE ABOUT 20 BILLION IOT DEVICES
OUT THERE TODAY, BUT THAT NUMBER WILL
GROW TO 1,5 TRILLION BY 2020."



THE INTERNET OF
THINGS WILL
MAINLY USE
SMALL
MESSAGES

ADDRESSED BY
MOBILE
OPERATORS

2G | 3G
4G

MULTIMEDIA
& VOICE

10%



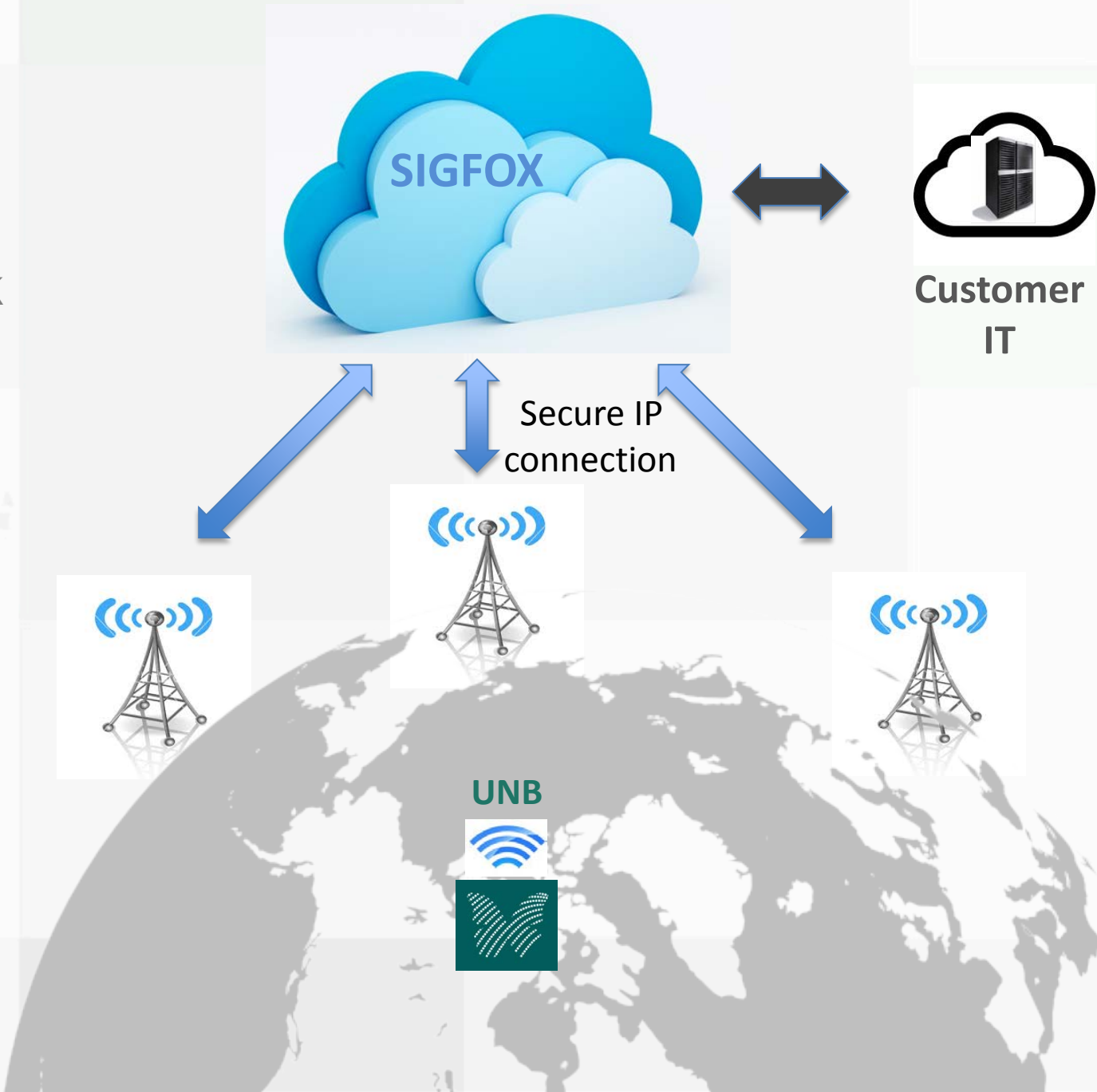
UNRELEASED
POTENTIAL

90%



THE GLOBAL
OPERATED
CELLULAR NETWORK
DEDICATED TO
SMALL MESSAGES

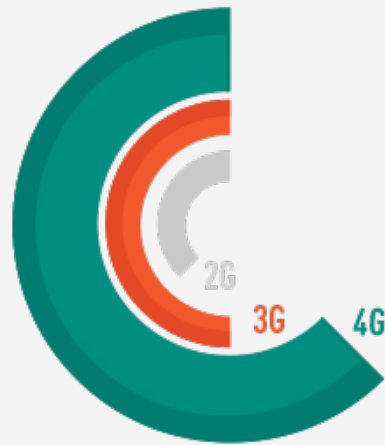
2-WAY
NETWORK





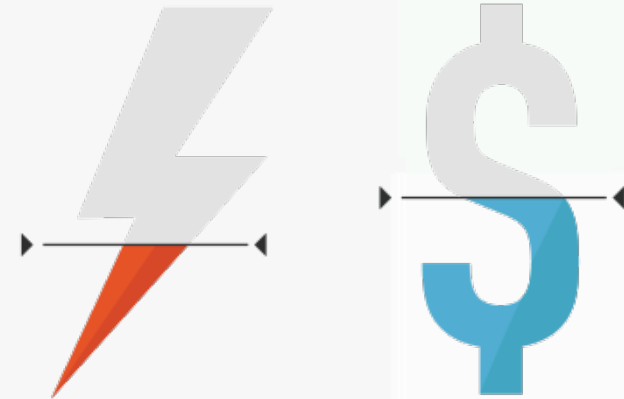
ENERGY
CONSUMPTION:
THE KEY TO THE IOT

STRATEGY FOR 2G|3G|4G



INCREASE
BANDWIDTH

STRATEGY FOR SIGFOX



REDUCE
CONSUMPTION & COSTS

300X LESS ENERGY
10X LOWER COSTS



ULTRA LOW POWER,
COST-EFFICIENT,
NO-PAIRING OBJECTS



1 - Any Radio Transceivers Chip Vendor

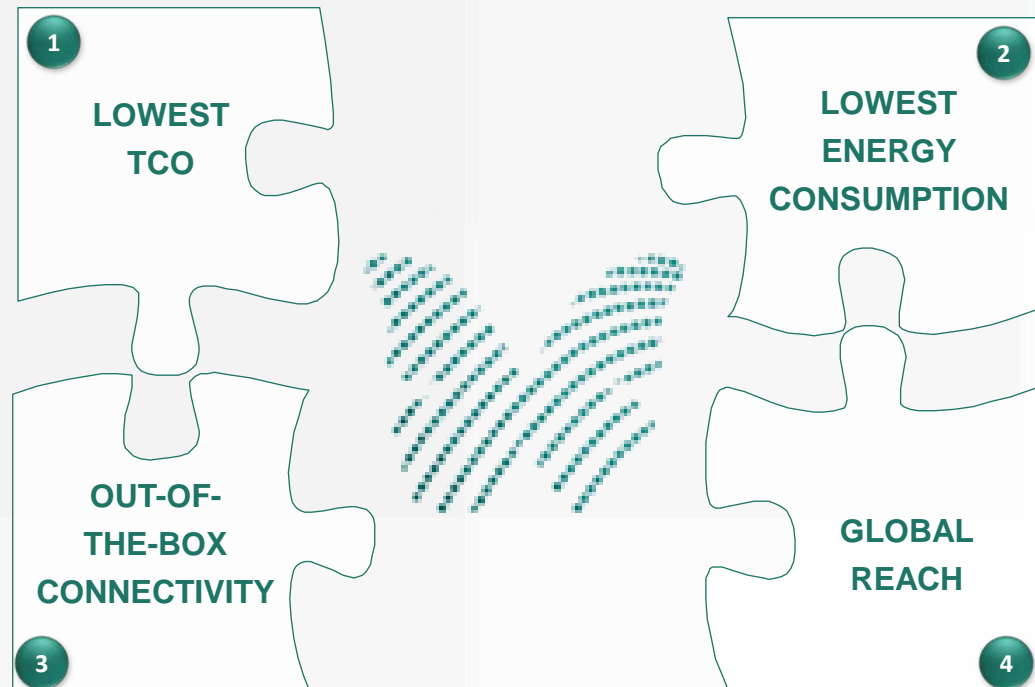


2 – Unlicensed SIGFOX Radio Software

3 – Unique SIGFOX ID per device



THE 4 UNBEATABLE KEYS THAT MAKE SIGFOX THE BEST POSSIBLE SOLUTION





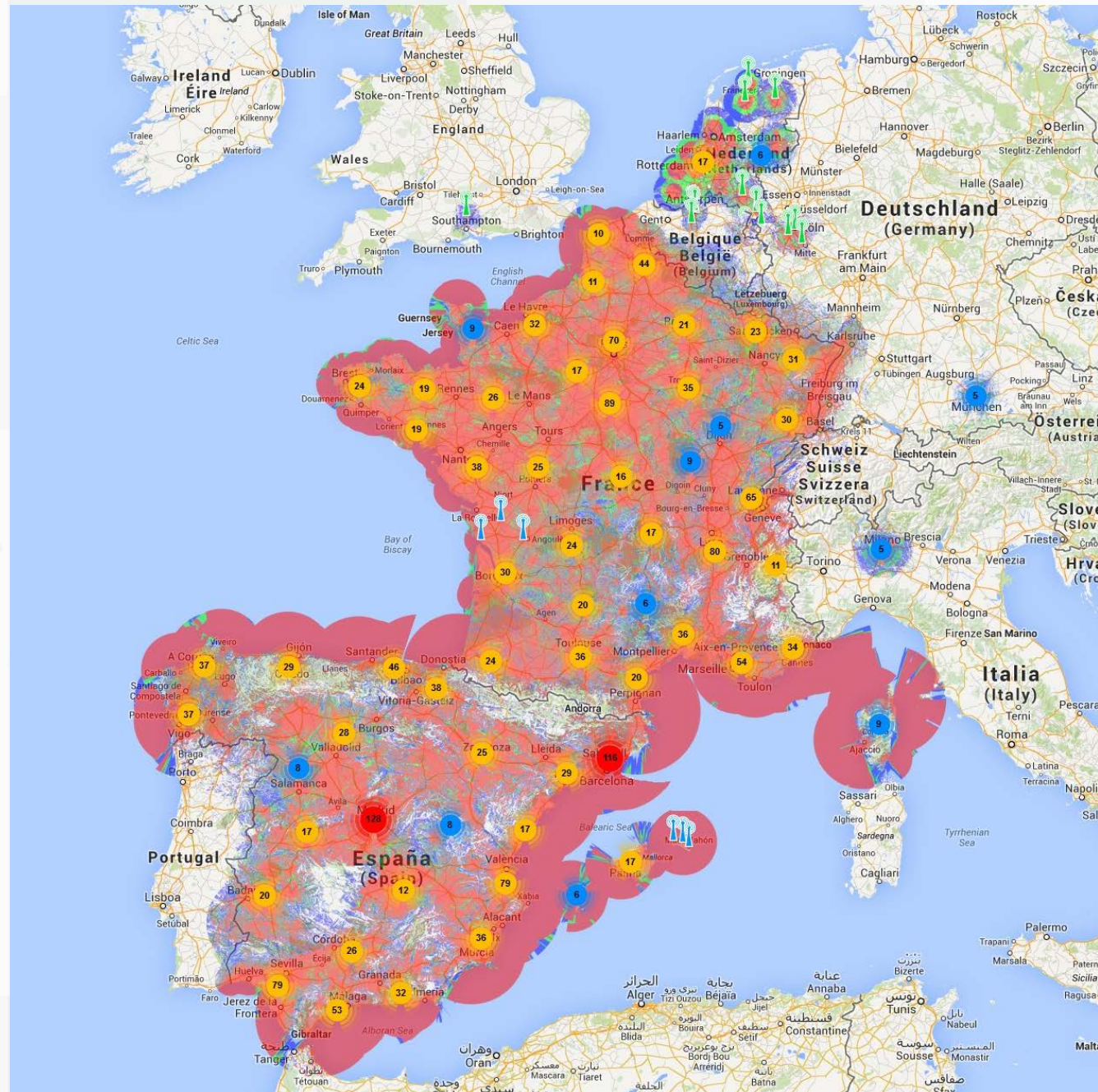
CURRENT COVERAGE

SIGNED SNO:

UK, BELGIUM,
PORTUGAL

ON GOING NEGOTIATIONS:

GERMANY, ITALY,
SWITZERLAND,
IRELAND, POLAND
KOREA, SINGAPOUR,
CALIFORNIA + USA
CHINA, INDIA, COLOMBIA,
CHILI





**5 STEPS TO GET
YOUR DEVICE
CONNECTED TO
SIGFOX NETWORK**

#1 Design device

#2 Have device certified

#3 Sign subscription agreement

#4 Get devices unique IDs to manufacture

#5 Power on device in the field

You're done ;-)



Water Metering

OPPORTUNITY

- **20% of the water distributed in developed countries is estimated to be lost (50% in emerging markets)**
 - Yield over 85% for each drinking water network by 2017 imposed by French Grenelle II Act
 - Huge investments required to improve existing water networks
- **Necessary to continuously monitor water flow consumption and be alerted of any water leaks in real time**

SIGFOX SOLUTIONS

- **Water AMR solutions use SIGFOX battery-powered radio transmitters installed on each meter to transfer the meter reading directly to a centralized management software program**
- **Water network managers can expect to operate the AMR solution for at least 12 years without battery replacement**

VISIBLE BENEFITS

- **Real-time monitoring of water distribution networks, with continuous reading of water meters, allowing:**
 - Increased frequency of readings
 - Detection of fraud and overconsumption
 - Invoicing based on actual consumption (rather than estimated)

Smart Parking

OPPORTUNITY

- Congested city centers
- Increasing parking pressure
- Necessary monitoring of parking information deterred by the OPEX and energy constraints of the GSM

SIGFOX SOLUTIONS

- Magnetic sensor drilled in the ground with SIGFOX connectivity
- Parking spots can be found via a mobile app or electronic street panels



VISIBLE BENEFITS

- Lowest energy consumption
- Lowest TCO
 - OPEX only driven by battery maintenance
- Reduced traffic density
- Optimized management of urban parking areas
 - Information provided on the most frequented areas and times of the day
- Green city with lower CO2 emissions

Alarm System

OPPORTUNITY

- Cellular connectivity used for alarm panels is costly and not reliable
- GSM connectivity can easily be jammed by burglars
- Alarm system providers have no choice but to find alternative connectivity solutions for redundancy purposes

SIGFOX SOLUTIONS

- **Second/independent communication channel enabled by SIGFOX**
 - Second channel of communication acting as a back-up if the primary communication channel fails
- No change in hardware, most alarm panels can be turned SIGFOX-ready through a firmware upgrade that can be performed via existing GSM connectivity

VISIBLE BENEFITS

- Very low investment to connect the panels with SIGFOX brings a lot of value for security providers through strengthened reliability
- Alarm system keeps functioning in the event of a power failure without bulky and costly back-up batteries

Secondary Connectivity

The background features a collage of IoT-related images: a white wireless router, a tablet displaying a dashboard with charts, a laptop showing a data interface, and a smartphone. At the bottom, there is a green silhouette illustration of a city skyline with houses, trees, a dog, and people walking.

OPPORTUNITY

- Need of connectivity when the device is out of reach of the GSM network
- Necessity of a backup connectivity solution in the event of mobile network failure
- Emergency backup connectivity when phone battery is low

SIGFOX SOLUTIONS

- Same WAN cells approach as the GSM with a communication protocol optimized for the IoT
- Embeddable into mobiles or tablets without hardware modifications

VISIBLE BENEFITS

- New business opportunities for manufacturers/MNOs
- Enables many innovative use cases (lost/stolen phone tracking, emergency SMS, etc.)
- Network reliability improvements and increased customers' satisfaction



Smoke Detectors

OPPORTUNITY

- Smoke detectors installation imposed by regulation
- Current reliability issue
 - Battery life
 - No connectivity

SIGFOX SOLUTIONS

- Remotely monitor the devices (battery + on/off status)
- In case of fire, the device can send emergency alarm message through its SIGFOX connectivity

VISIBLE BENEFITS

- No other technology could provide a comparable solution, constrained by cost and energy consumption
- Reliability dramatically increased at a marginal cost (key for insurance companies)
- Lifetime connectivity cost can easily be bundled in the product cost

Home Care Monitoring

OPPORTUNITY

- Explosive eHealth solutions for elderly people with booming “silver economy”
- Monitoring of home care for aged people deterred by the OPEX and energy constraints of GSM
- Call for affordable and reliable low throughput connectivity since broadband penetration is extremely low among the targeted audience

SIGFOX SOLUTIONS

- Time monitoring
- Attendance control of nurses
- Connected strap for Alzheimer patients allowing to detect falls or house/hospital border crossing thanks to SIGFOX network's unique geolocalisation features



VISIBLE BENEFITS

- Improved services of home care which is a key priority to reduce the cost burden on social security systems
- Lowest TCO
 - OPEX only driven by battery maintenance
- Lowest energy consumption
- Stability and reliability
- Easily replicable

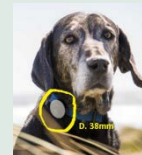
Asset&Human Tracking

OPPORTUNITY

- **Whistle is an existing activity monitoring device for pets (dogs) using a small collar attached device that logs data and uploads periodically to a Smartphone via Bluetooth**
 - The device has a battery life of 10 days between recharges
- **Additional wide-area tracking service could possibly be leveraged with the collar hardware gadget**

SIGFOX SOLUTIONS

- **WhistleGPS**
 - No change in hardware (in particular, no GPS module in the collar)
 - No compromise in device autonomy
- **The WhistleGPS relies on SIGFOX network to poll the collar device and triangulate location information between base stations**
 - Location accuracies in the range of 100m with cell density of 1-5Km or less



VISIBLE BENEFITS

- **SIGFOX is a key enabler to allow pet tracking at a very low cost in spite of strong energy, coverage and size constraints that could not be met with any other existing technology**



**FUND RAISING
till 2014 > 27M€**

**NEW ROUND
COMPLETED IN
FEB 2015: 100M€**



ANNE LAUVERGEON

Chairwoman of the Board

Anne Lauvergeon is a French businesswoman and former Deputy Secretary-General to the office of the President Mitterrand. In 1997, she joined Alcatel as Deputy CEO, before becoming CEO of Cogema, now Areva, which she led until 2011. In 2009, she ranked in Forbes magazine top 10 most powerful woman in the world.

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SMALL MESSAGES, HUGE IMPACT