



**Making things come alive!**  
Connecting your ideas

The background is a blurred image of a code editor with syntax-highlighted text in various colors (yellow, green, red, blue) on a dark background. A large white circle is overlaid on the left side of the image, containing the text.

# Alex Bucknall

Developer Evangelist

@AlexRBucknall



# What is a LPWAN?

Low Power Wide Area Network



# **L**ow **P**ower **W**ide **A**rea **N**etwork

Sending messages at long range...  
...with very little energy!



FIRE STARTING



MY BATTERY IS LOW



I'M FULL



I'M LOST



I AM AT  
THE WAREHOUSE



I NEED  
TO BE REPLACED



I NEED  
REPAIR



PRESS  
TO ORDER





One Network

Energy Efficient

Low Cost

**Simple**





# What is Sigfox?

LPWAN and the IoT







**Sigfox** does **not** build chipsets

**Sigfox** does **not** build IoT solutions

**Sigfox** invented a radio protocol

**Sigfox** operates a global network

# A Network for Sensors & Devices

- 12 Byte Payload
- Optimised for Low Power
- Public network
- Wide range (5-10km in Urban, 100km+ in Rural)
- Cloud Service for data retrieval (REST API/Callbacks)

# Simplified Communications

An object **emits** a message.

Our antennas **receive** the message.

We **relays** the message to its destination.

No **device handshake**, unlike GSM or other protocols.

It's not a **new** technology, just a **new** use case!





# Why Sigfox?

- Incredibly low power
- Simple to develop/design for
- Cheap to deploy devices
  - Free for makers, education, prototypes
- Global network, no roaming fees
- No complicated network management

# Developing with Sigfox

- Open Hardware Approach
- Arduino compatible dev kits
- Self-contained solutions with SDKs
- Many different packages/ solutions (Sigfox + GPS, etc.)





# Workshop Session

## Getting started with Sigfox





Alex Bucknall  
@AlexRBucknall

[alex.bucknall@sigfox.com](mailto:alex.bucknall@sigfox.com)