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Internet of Things

RURAL OPPORTUNITIES FOR BETTER LIVING.

Technology Overview

- What are IoT devices
- What is a low level network
- How are they used together

IoT Devices for the home.

- Temperature sensors, Artificial Intelligence (AI), or learning patterns
- Humidity sensors
- Movement detection
- Energy usage, oven still on!!
- Door sensors
- Security catches
- Alexa does her bit
- And lots more

Examples of IoT Devices for the Town

- Air quality
- Bridge sensors
- Car parking measurement and prediction
- Speed control and licence plate recognition
- Illegal or inappropriate street parking
- Tags for local vehicle owners
- And lots more

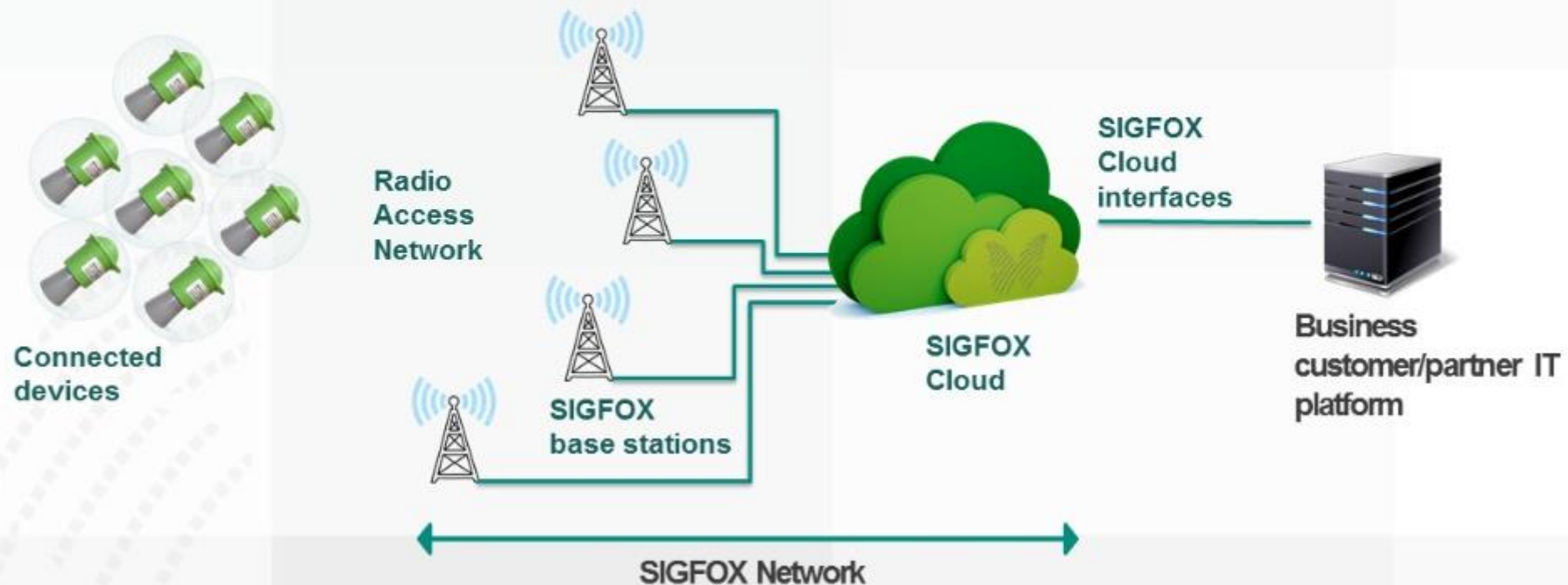
Low Level Networks

There are two popular low level networks currently in vogue

- LoRaWAN
- Sigfox

A typical low level network

SIGFOX Network has a **star topology**: each of the base stations communicates with the SIGFOX Cloud via a **point-to-point link**



What pilots could LEADER support

INDEPENDENT LIVING

- Young Carer
- Managed housing
- Low level dementia
- Hospital discharge

SMART TOWN

- Traffic
- Parking
- Environment
- Tourism

SOCIAL HOUSING

- Occupancy
- Fuel usage
- Property conditions
- Safe living

Preparation to date

- Wavereach
- Innovate UK 5G test beds and trials
- DCMS Local Full Fibre Networks bid
- IoT incubator Wales
- Welsh Government
- Digital Catapult
- Kings College, Bristol and Sussex Universities
- Social Services MonCC
- Careline services Torfaen
- Usk Town Council
- Melin Homes
- Monmouthshire Housing
- Charter Housing
- Usk Primary School

LEADER Application

A funding application is being prepared by Monmouthshire County Council Social Services and Careline team. The details and value will be available within 3 weeks to share initially with the digital theme group.

Similar discussions are due to happen with the Usk Primary School headteacher to encourage the children, staff and parents to embrace and push forwards the benefits of this new age of technological advances

Any further information required or any questions, please let me know