TheThingsNetwork.org

The Things Network (TTN) provides a packaged configurable solution to integrate monitoring devices in any location.

In 2015 **The Things Network** crowd-sourced a complete city-wide Internet of Things data network with the people of Amsterdam in 6 weeks. It has now grown to over 10 UK, and over 100 European sites, and has a pipeline process to cover the globe.

TTNReading.org

Reading is leading the rollout in the UK with 5 Gateways installed including in GROW, rLab and Sage. Elsewhere in the UK London, Thatcham, Bournemouth, Frome, Boxsted and 5 others are developing local TTN projects.

The Technologies

Based on open standards, using tried & trusted technology, and crowd-sourced community support. This innovative, scalable implementation is set to be THE Internet for IoT devices.

TTN uses the wireless standard called **LoRaWAN,** it is perfect for IoT as it is low on battery use, long on range, and low in bandwidth. This is appropriate for sensors, but not for web, video or audio data. It uses licence free, global radio frequencies and approved radio chips. Covering an entire city can be done by the community with a relatively small investment. TTN are developing open services for Devices, Gateway Management, and Cloud Brokering.

What is it used for?

TTN has unique value in areas such as boating, both inland waterways and up to 10 km from the coast, in Ports, around Farms, in Social Housing and Gated Communities.

TTN connected sensors are called 'nodes'. They can be weather proofed with a battery life of months or years. They send data to cloud services via the Internet and LoRaWan Gateways, from distances up to 10km in rural and 3km in an urban area. They may be used to sense things such as gates opening, temperature, humidity, movement of people or animals, water levels, etc. They may be mobile or static. Small ones may even track Hedgehogs.

Who should join in?

TTN allows Insurance companies to better manage risk by systematic monitoring and analysis, so you can join Individuals, company representatives, community groups, local councils and help the rollout. Everyone can benefit by helping achieve the vision of The Things Network.

Thingitude.com

Thingitude is a community company formed to support those who are helping bring TTN to the UK. There are no geographic boundaries to TTN, though each area has an initiator and each gateway has a location. Collaboration between areas will help speed deployment and reduce costs.

ThingInnovations.uk

Thing Innovations is the Internet of Things development consultancy with experience deploying sensing products in a wide variety of areas.

Flood.network

An example of sensors making a difference is the project building the UK's biggest network of flood sensors that started with the Oxford Flood Network.

Thank you for your interest in TTN and the shortlisting for the IoT Award, we look forward to providing more details about TTN and the projects they are supporting. Contact: TTN UK Supporter - Mike Beardmore, email: ttn-iia@yonk.eu