



# BUILDING A GLOBAL INTERNET OF THINGS NETWORK TOGETHER

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# AGENDA

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- 1 LoRa  
How it started
- 2 Building a global network
- 3 Use Cases
- 4 How to join
- 5



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Long Range Wide Area Network

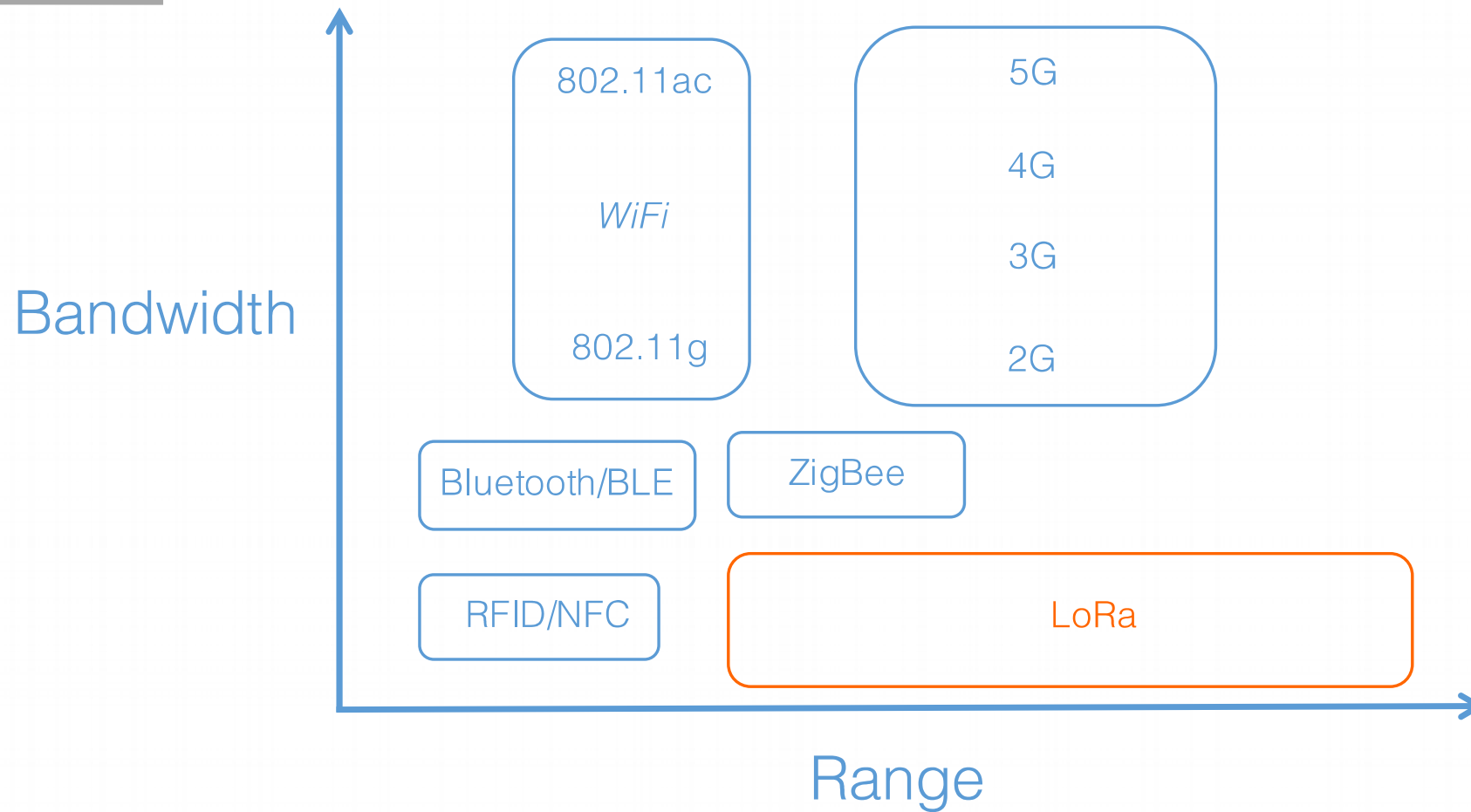
# WIRELESS COMMUNICATION



Suitable for Spotify, Netflix,  
large file exchange

Suitable for battery powered,  
connected sensors

# LORA



# LORA

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## RANGE

☒ Yes ☐ No

Up to 15km

## LOW POWER CONSUMPTION

☒ Yes ☐ No

Devices can last months / years  
on a battery

## THOUSANDS OF DEVICES

☒ Yes ☐ No

Can be connected per gateway

## UNLICENSED SPECTRUM

☒ Yes ☐ No

868MHz (EU) 915MHz (US)

## BANDWIDTH

☐ Yes ☒ No

Max 50kb/s

# HOW IT ALL STARTED

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July 2015, Amsterdam







Our mission is to build a  
DECENTRALIZED,  
OPEN and CROWDSOURCED  
INTERNET OF THINGS data network  
OWNED and OPERATED by its USERS





# HOOSJE BOOTJE

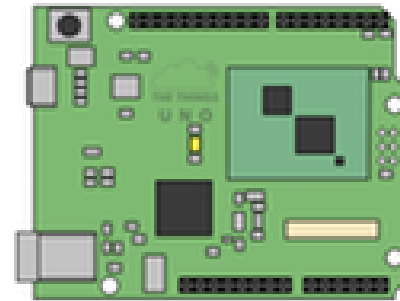


# BUILDING A GLOBAL NETWORK

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# KICKSTARTER





KICKSTARTER

KICK  
STARTER



# BUILDING A GLOBAL NETWORK

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With help of communities



## 80+ COUNTRIES



# TOGETHER CONNECTING

## 1100+ GATEWAYS

(February 2017)



# HOW DOES THIS WORK?



**DEVICES**

**GATEWAYS**

**NETWORK  
SERVER**

**APPLICATION  
SERVER**



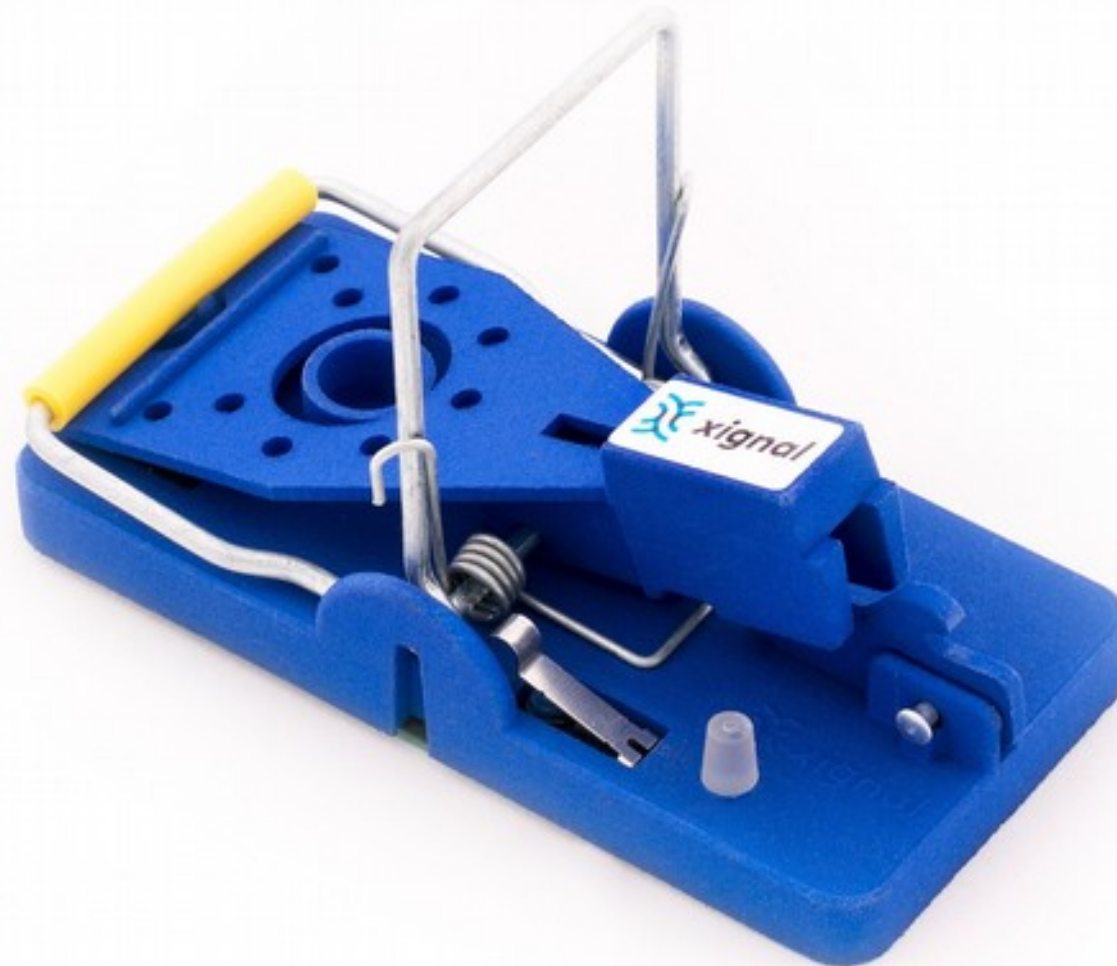
# USE CASES

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So, what can you do with it?

# SMART MOUSE TRAP

[www.signal.com](http://www.signal.com)



# AELORA

[www.aelora.nl](http://www.aelora.nl)



# FLOOD.NETWORK

[www.flood.network/](http://www.flood.network/)



# FLOOD.NETWORK







# BORA – CHILDREN AIR QUALITY KIT

[www.waag.org](http://www.waag.org)





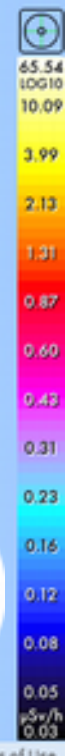
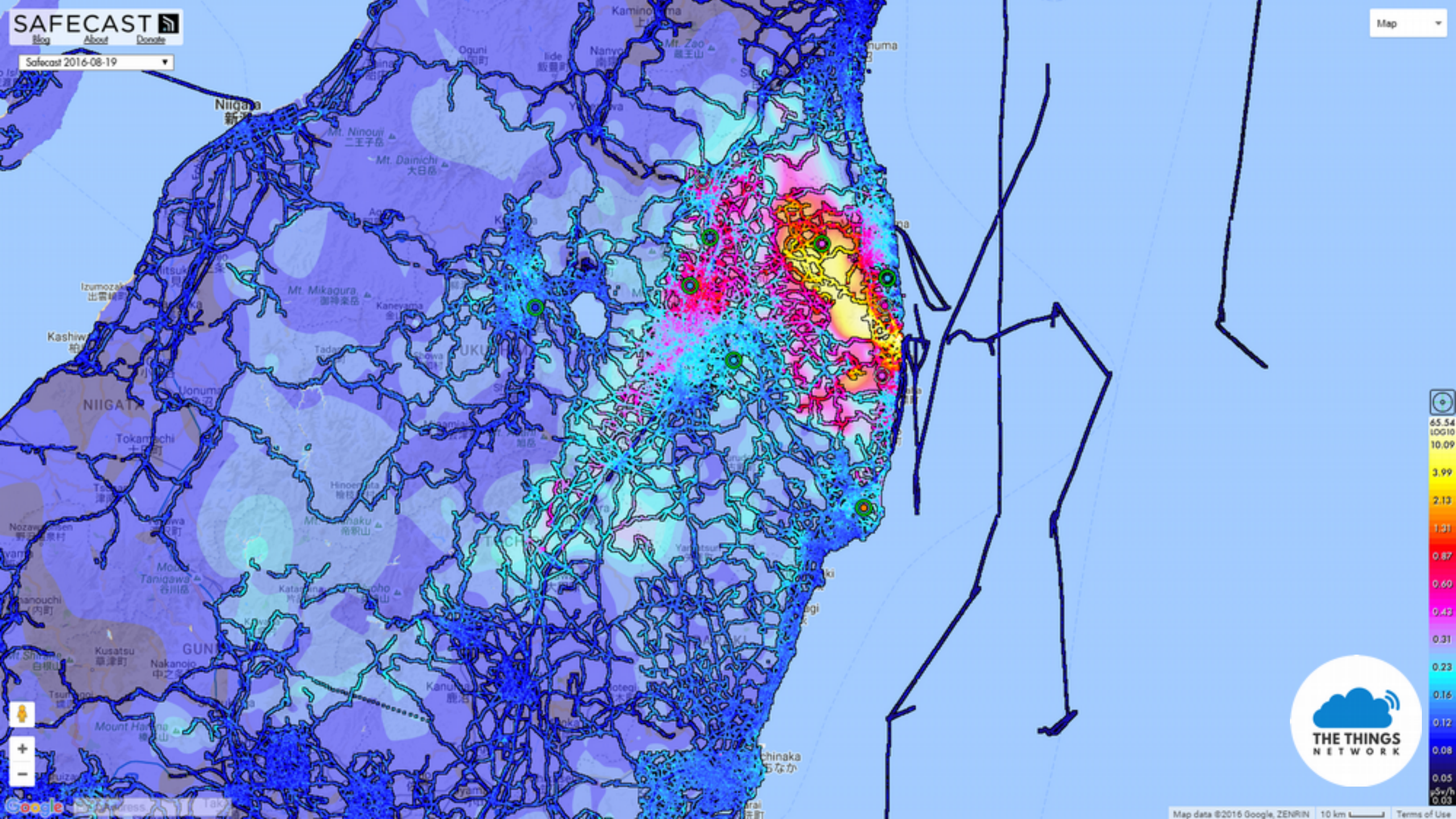
# SAFECAST

[www.blog.safecast.org/](http://www.blog.safecast.org/)





Safecast 2016-08-19



# WE'RE BUILDING THIS THING TOGETHER!

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Join us!



**CONNECT  
GATEWAYS**



**CONTRIBUTE  
OSS**



**BUILD YOUR  
COMMUNITY**



**SHARE!**



LET'S UNLEASH THE  
INTERNET OF THINGS!







YOU ARE THE NETWORK  
LET'S BUILD THIS THING TOGETHER!

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[www.thethingsnetwork.org](http://www.thethingsnetwork.org)