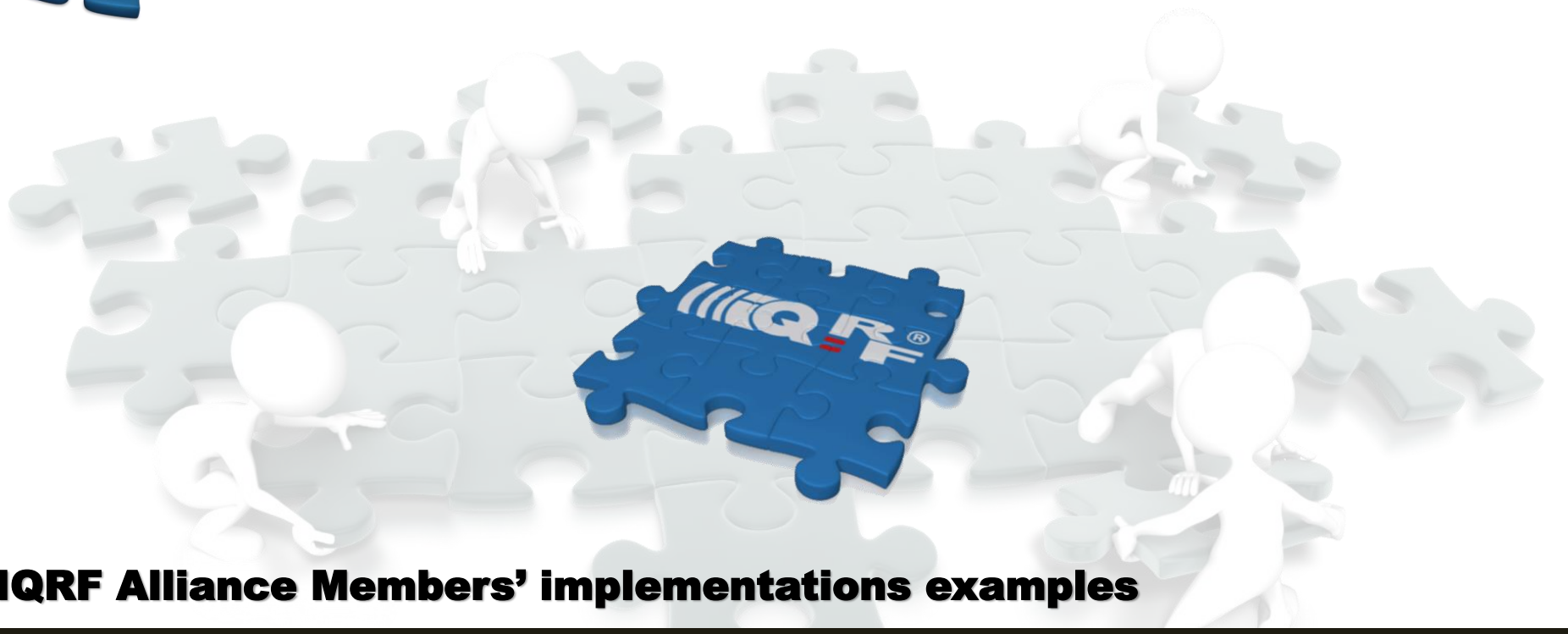


# IQRF Alliance Members' implementations examples

**Šimon Chudoba**
IQRF Alliance, CEO
Jičín, Czech Republic

**IQRF® Alliance Meeting 2016**
October 19, 2016, Warsaw

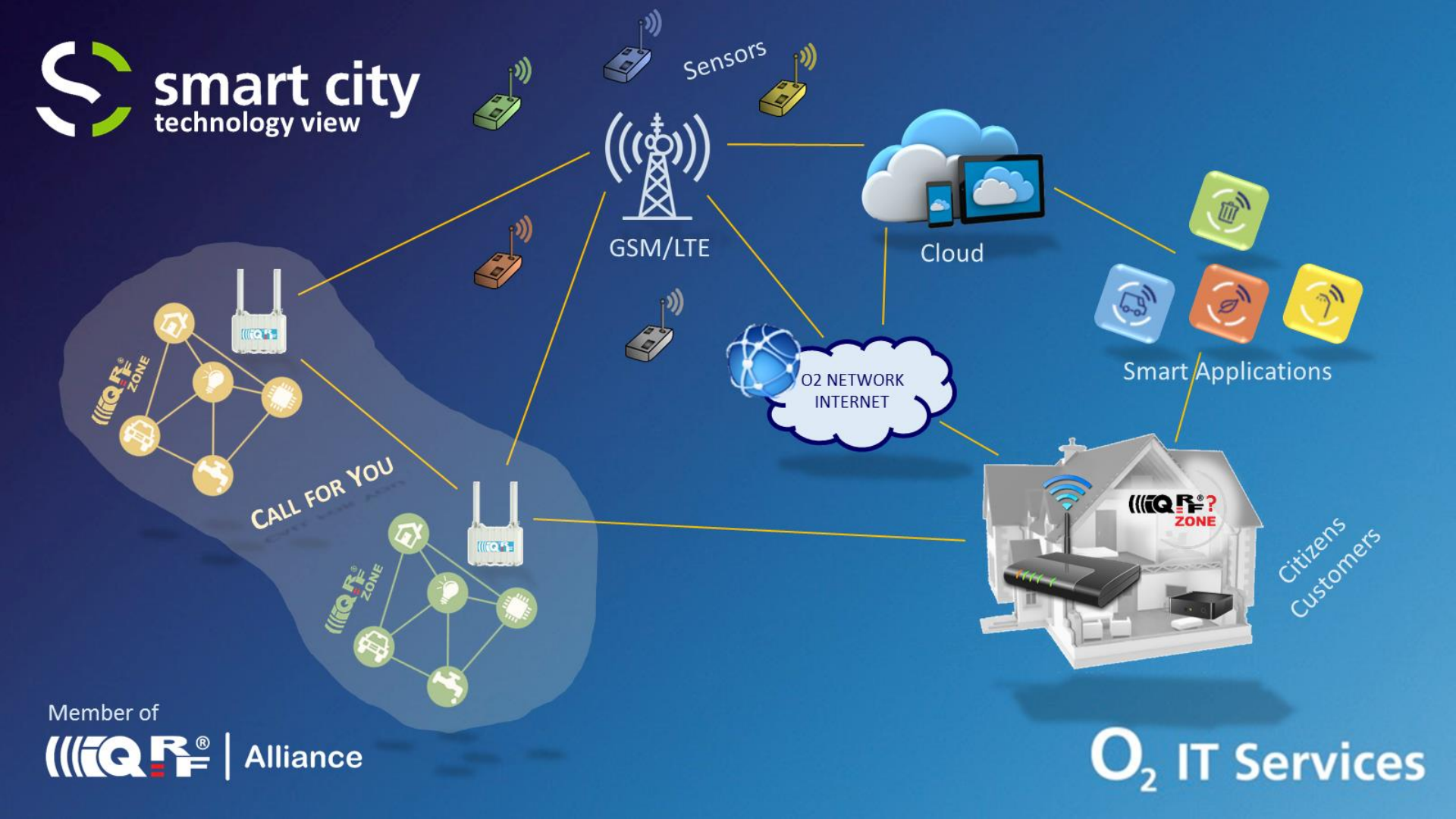
smart city

# This is how we understand the Smart City

1) Information
2) Environment
3) Waste Management
4) Energy Management
5) Transport
6) ICT Infrastructure

Member of IQRF Alliance

$O_2$ IT Services


smart city
technology view
Sensors
GSM/LTE
Cloud
Smart Applications
O2 NETWORK
INTERNET
CALL FOR YOU
Citizens
Customers
Member of
Alliance
O2 IT Services

smart city
technology view

**We are going to make Smart Cities reality**
and we have…

- ✓ CUSTOMERS
- ✓ COUNTRYWIDE NETWORK
- ✓ CLOUD PLATFORMS
- ✓ SMART APPLICATIONS

# Let's do it TOGETHER

… however some things are still missing

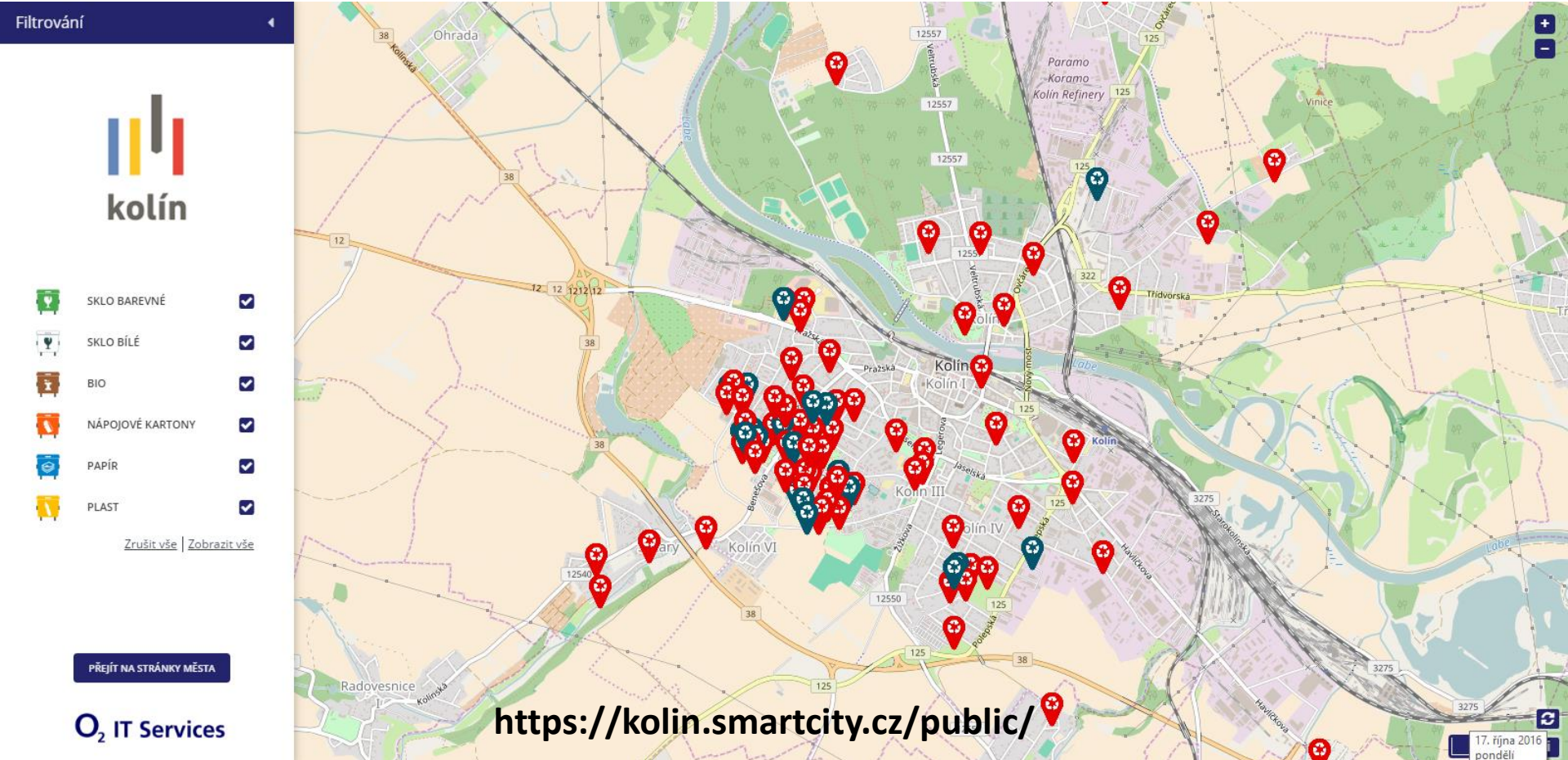
- INDUSTRIAL GRADE **GATEWAYS**
- **SENSORS** FOR MENTIONED AND OTHER APPLICATIONS
- AND OF COURSE…. IQRF **ZONES**

Member of IQRF Alliance

O2 IT Services

# Smart City Kolin

Alliance

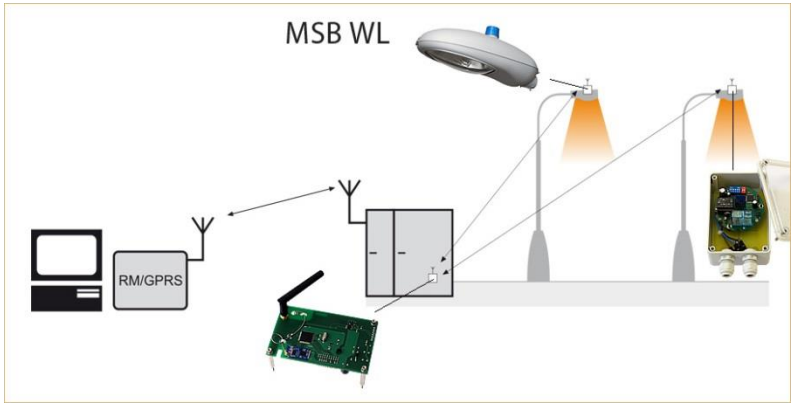


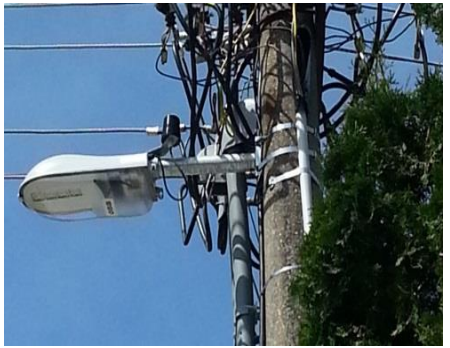
# Smart City Pisek

- Complex Smart City project
- Czech Smart City Cluster: E-On, Schneider Electric, Ceska Sporitelna, TCP, CVUT…)
- Street lighting, street parking, sensors: traffic, dust, noise, NOx, …

- IQRF used as a standard wireless platform
- Roll out to other Czech and European cities

# Street lighting

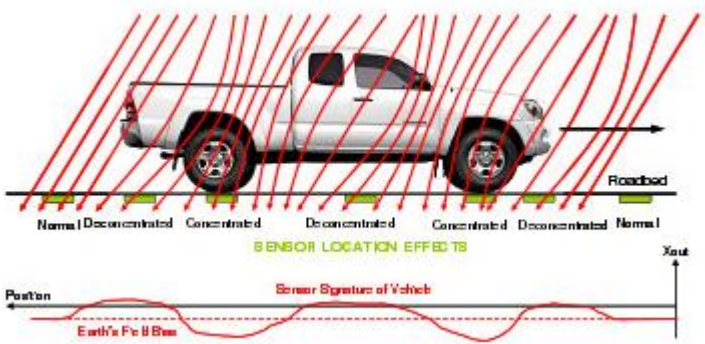


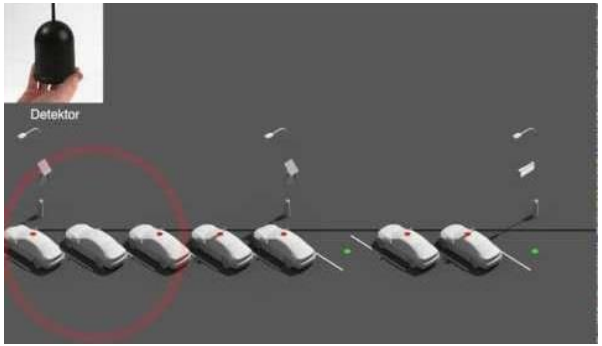


- Complete street lighting solutions
- Up to 240 lamps in one network
- Over 200m distance between lamps
- Savings over 50% (LED lights and wireless control)

- Tens of thousands lamps installed and running since 2008
- Control, data download, infrastructure database

# Street parking






- Car presence sensor + GW + control SW
- Information from sensor to SW within 6 seconds
- Battery life 15+ years (10 years guaranteed)
- 100% vandal proof
- Payback period up to 1 year

# Smart Home:
# Making it a reality

IQRF Conference, Praha

Jindřich Fremuth
May 25, 2016

# ...and millions of customers with a desire to use them

O2

# A typical mass market customer does not understand... and does not care...

What is it for?

How will I set it up?

It's expensive

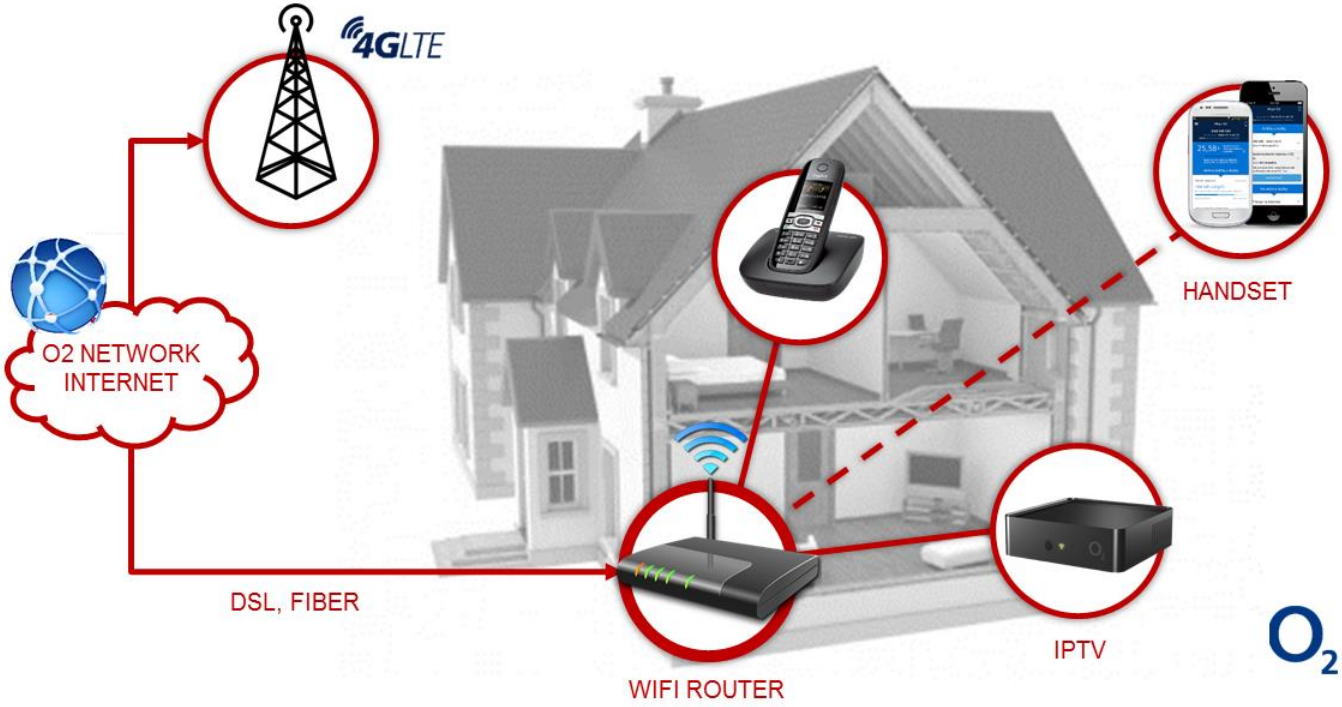
It's not compatible

It's a gimmick

O2

# Integrated telecom operators have the most complete go-to-market infrastructure

- We provide HH **connectivity**
- We have strong **distribution** channels
- We have a **billing** relationship
- We influence mobile **handset eco-system**



$O_2$ is ready to work with you to help making Smart Home a reality…

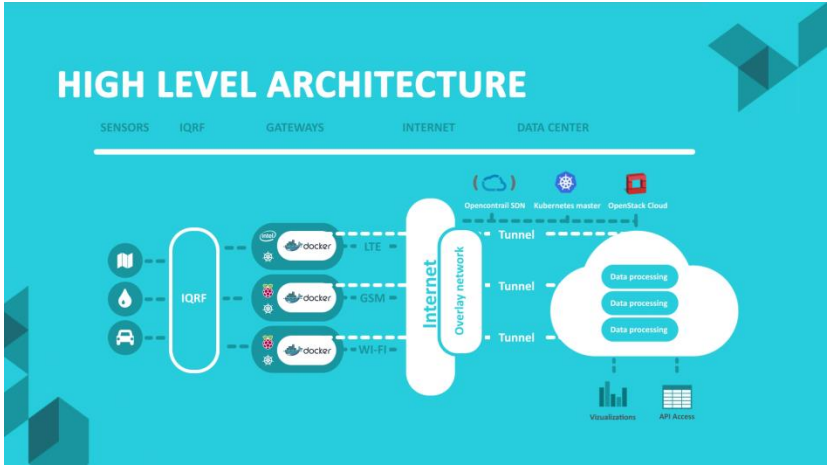
# Industrial lighting

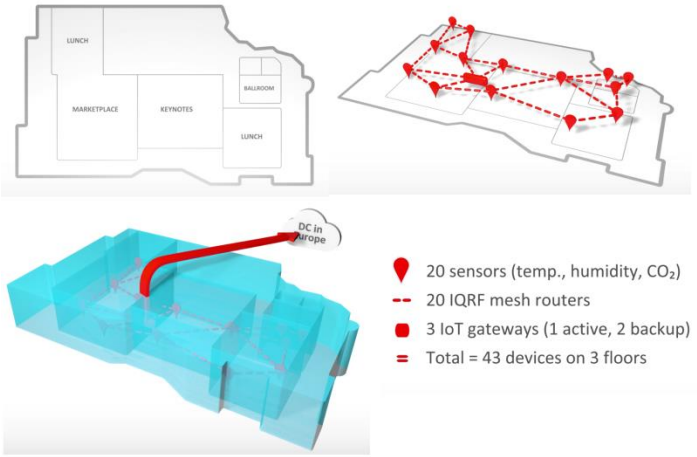
- Complete industrial lighting solution
- Up to 240 lamps in one network
- Up to 61 networks in one area
- Payback period less than 3 years
- Savings up to 65% (LED lights and wireless control)
- Excellent customer reference

# Industrial heating

- Complete solution for industrial heating
- Payback period less than 3 years (guaranteed)
- Wide range of actuators and sensors
- Products from other IQRF Alliance members integrated (scalability)

# IoT platform based on Openstack




- Open IoT platform using state-of-art cloud technologies such as Openstack, Kubernetees, Opencontrail, Docker, …
- No limits in scalability

- Aplicable for Smart Cities, Smart Buildings, Smart Homes, Ineternet of Things

# Events

**8. – 11. November 2016**

**Munich, Germany**

# IQRF Alliance Meeting

**11. - 12. January 2017**

**HQ of Microsoft CZ, Prague**

Microsoft

O2 IT Services

MICRORISC

# IQRF Conference

**Prague, May 2017**

**200 – 300 participants**

# Join us!

# Together we are stronger.