What is the Internet of Things?

IoT refers to the connection of everyday objects to the Internet and to one another, with the goal being to provide users with smarter, more efficient experiences.
Don’t forget to buy milk!
**IoT and The City**

On a broader scale, it is being used by cities to monitor things like the number of available parking spaces, air and water quality, and traffic.
We are becoming more ‘connected’ every day…

By 2020 there will be 50 Billion devices connected to the Internet
Which sector will see the most growth?

Although ‘wearables’ get a lot of attention, it’s actually large enterprise and infrastructure projects that will see the highest growth.
Addressing all these devices: competing interests

There are two distinct approaches to IoT addressing – and different players in each space.
Why should ccTLD registries care?

- We are part of our nation’s critical infrastructure.
- We wish to remain a key part in the future of the internet
So how should we respond?

Understand our role at the ‘center’ of addressing internet communications and where this might lead.
It’s all in the airwaves…
UK TV Whitespace trials – an ideal entry point to device-to-device communication
Smart Cities

Increasing desire for cities to have connected and smart infrastructure and services
Oxford: not the most ‘high-tech’ of cities, yet….

We have decided to work in our home town on a number of projects that will turn Oxford into a much ‘smarter’ city.
Oxford flooding

The river Thames (and its tributaries) flows right through the center of Oxford
Community Sensor Network

OXFORD

Bridge/Overhang/Floor Void

Sensor

Ultrasonic Pings

Water

http://www.flickr.com/photos/52388354@N00/
City-wide Internet of Things network
What next?

Working on traffic and air quality sensors throughout the city to bring together a ‘grid’ of data that we hope, can create beneficial social and commercial outcomes
Outcomes?

- An understanding of the role for registries and registrars in the IoT future.
- What’s the future for DNS?
- Social and commercial opportunities through IoT technology
- How to maintain a central role in Internet technology as our usage patterns change.
MY COFFEE MACHINE HAS UNFOLLOWED ME