



THE BENEFITS OF SPATIALLY CONNECTED GOVERNMENT

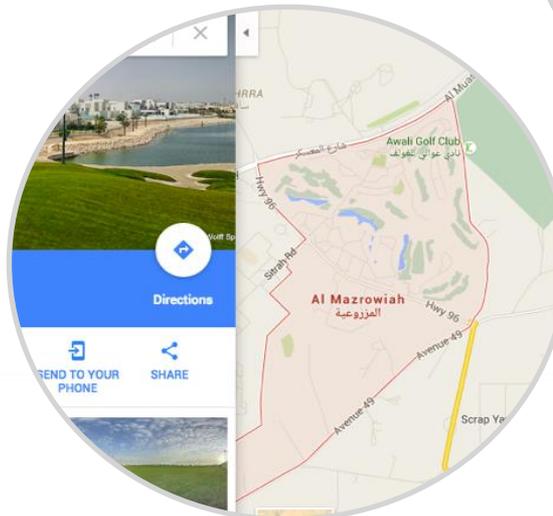
Andy Wilson
Ordnance Survey International



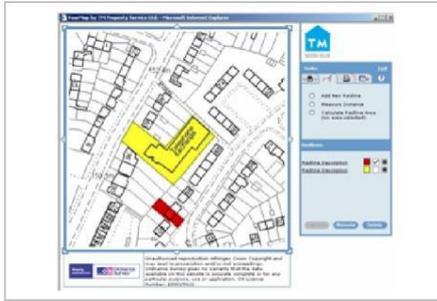
Ordnance
Survey

UN GGIM-AP Geospatial and GNSS CORS Infrastructure Forum, 16th
October, Kuala Lumpur

Mapping is everywhere...



Location- the vital component!



Location – a meeting point for information?

Postcode
?

Place
name?

Coordinates
?



Unique spatial
code for every
real world
object

UPRN

Allocation of school places



Connection of utility services



Delivery of social care



Streetworks



Register to vote



Collection of waste



Payment of taxes

Quotation for insurance



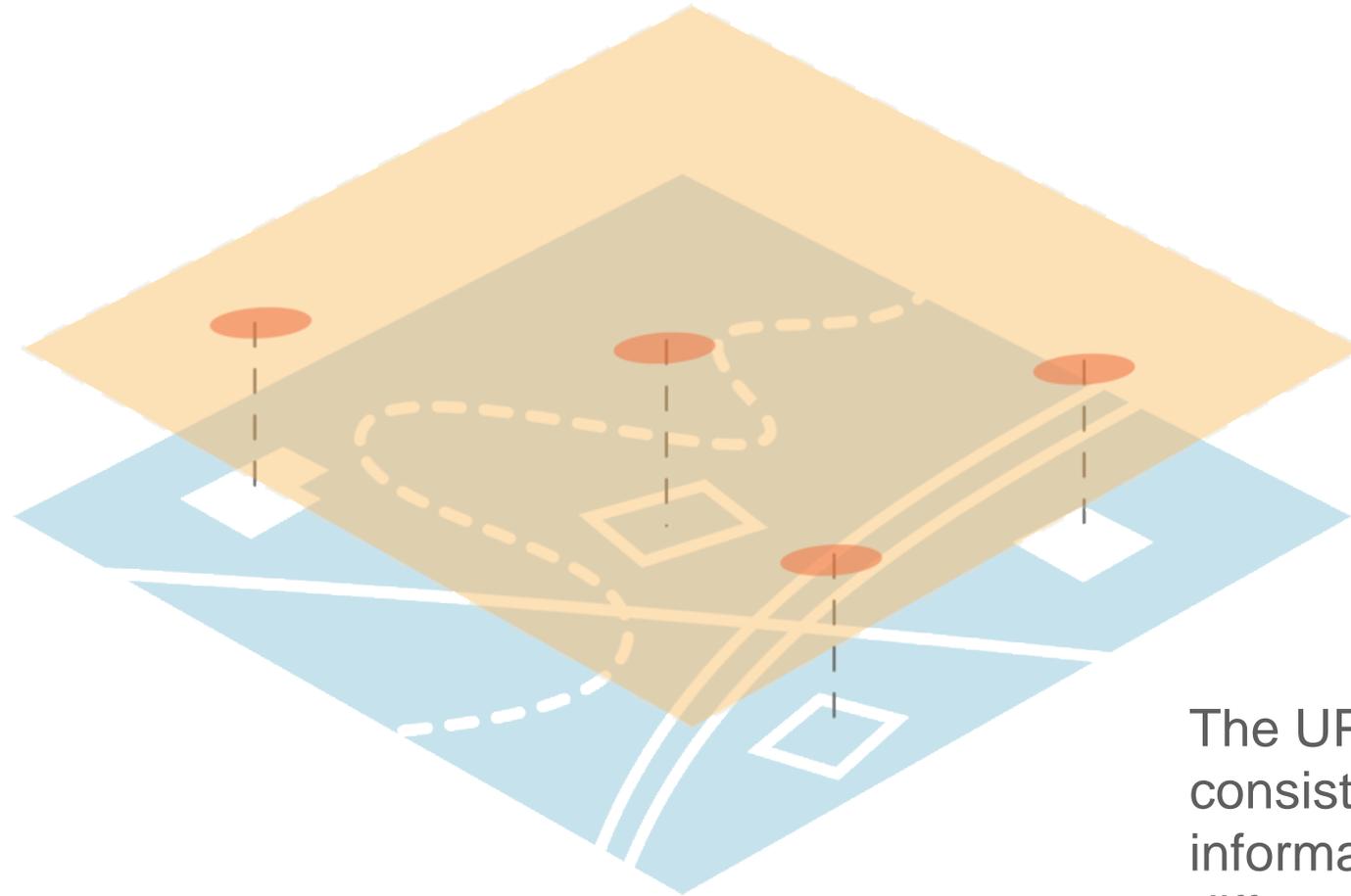
Delivery of packages



Emergency situations

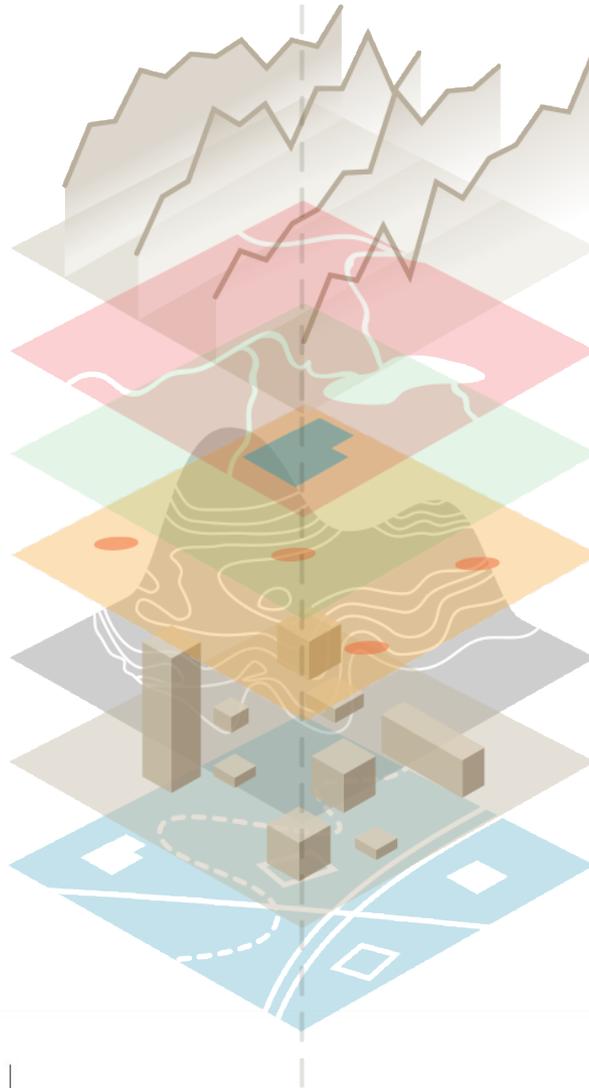


A Unique Property Reference Number (UPRN)



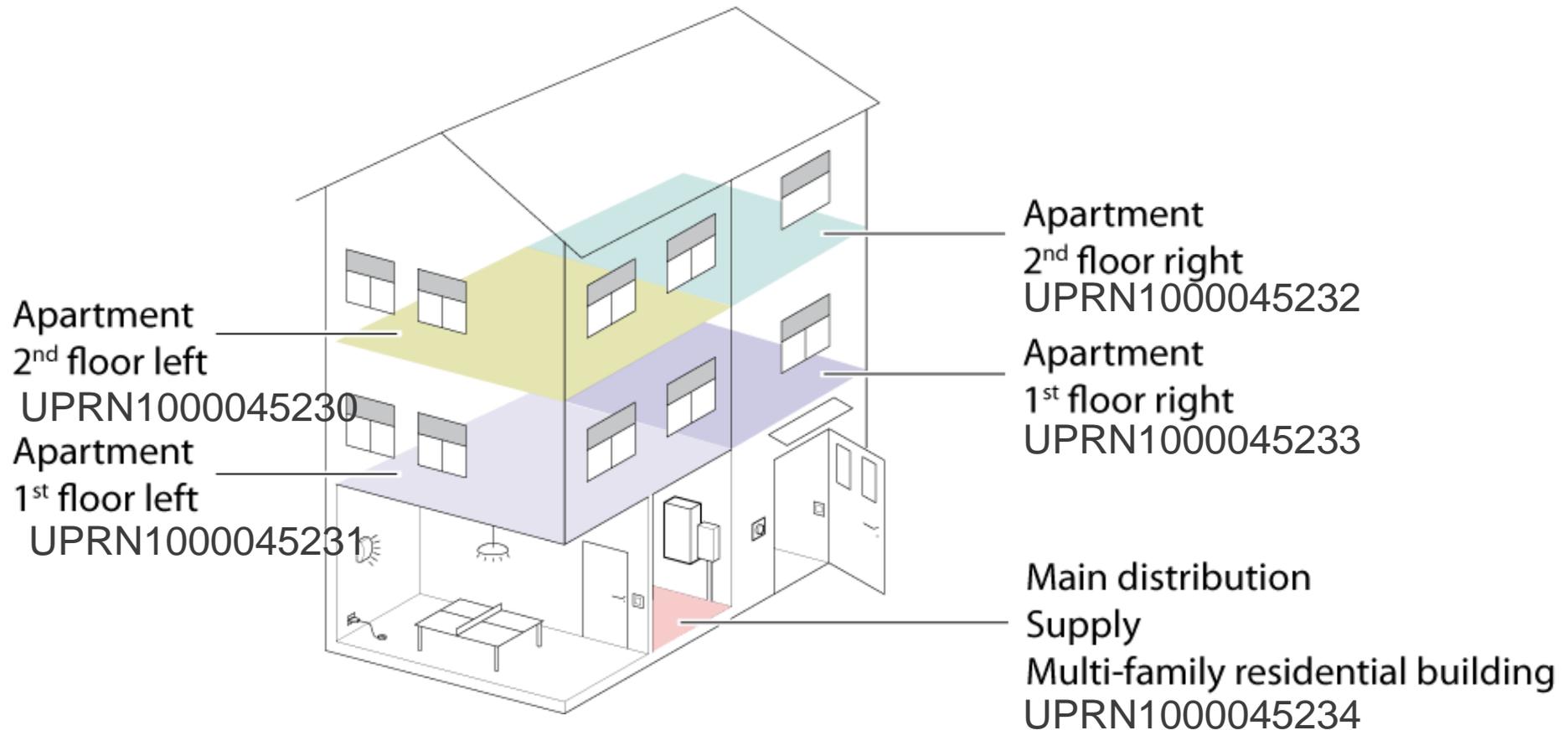
The UPRN becomes a consistent point to join information from different organisations across government.

Unique Consistent Reference -Linking all government information



- Health records
- Flood plain
- Land ownership
- Utility supply/smart meters
- Topography
- Height of building? Floor levels?
- Crime, education, vulnerable persons

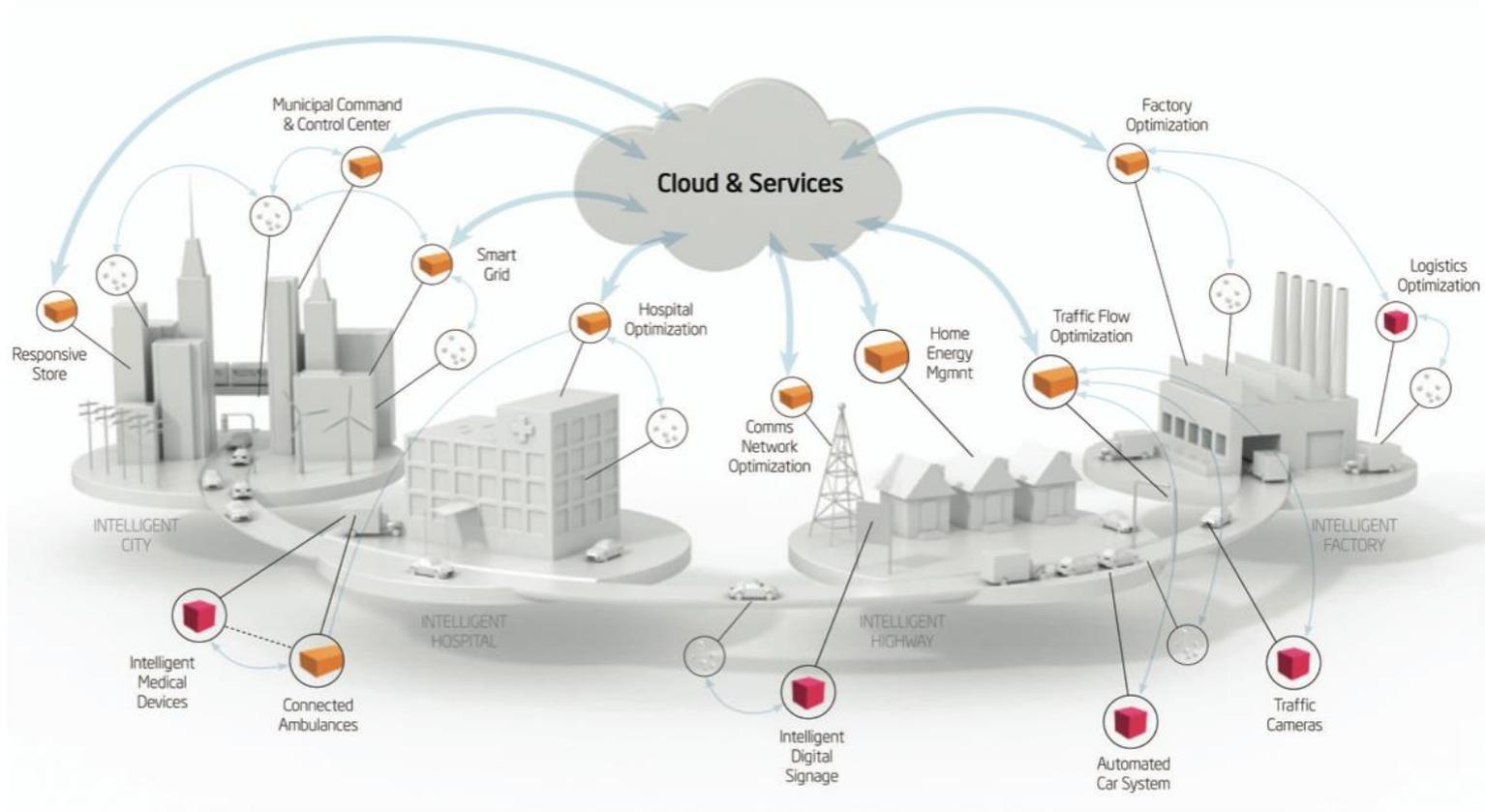
UNIQUE IDENTIFIERS FOR EVERY LOCATION/APARTMENT



50 billion Internet-connected things by 2020

Sensors Everywhere

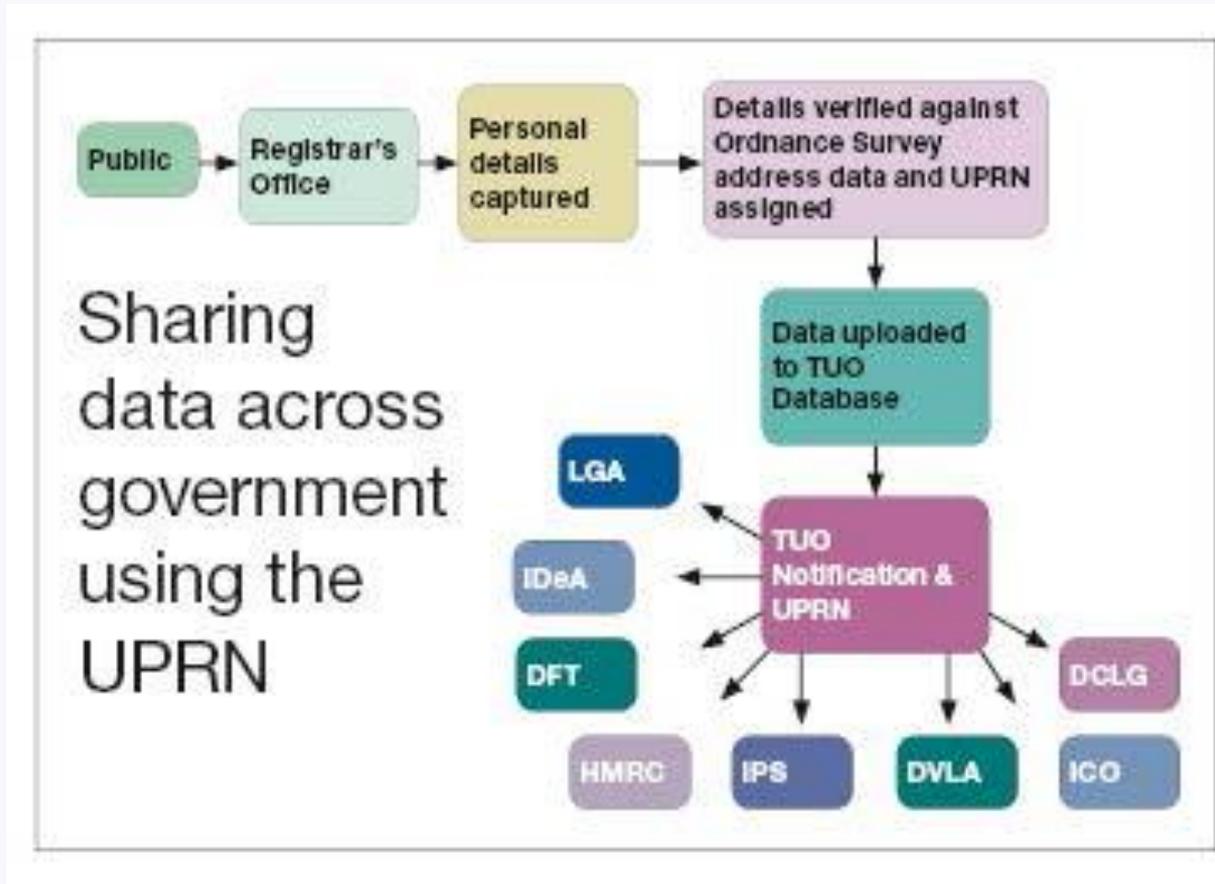
(Things or Devices)

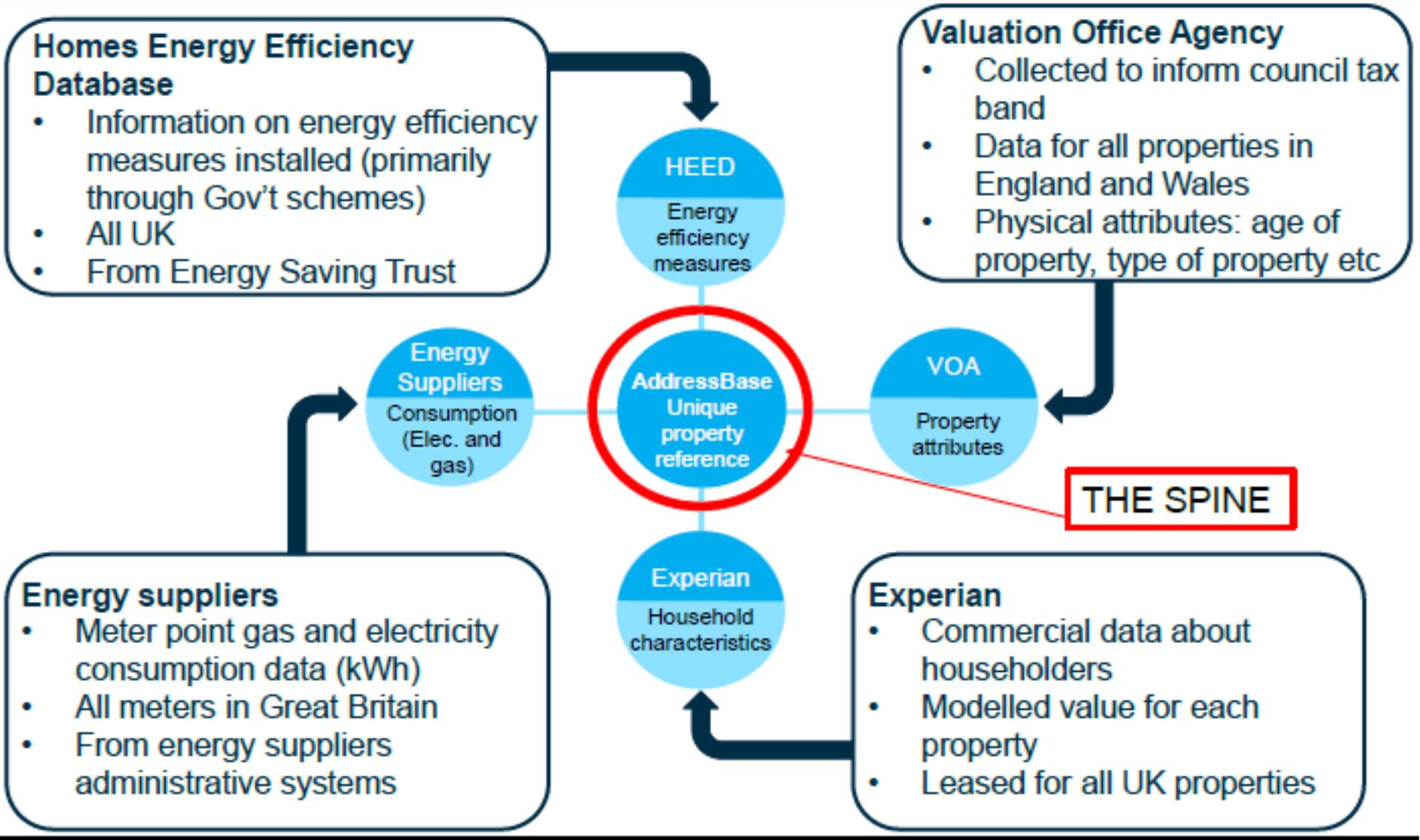


Tell Us Once- UK Department for Works and Pensions

Over 10 years, **\$400 m** in savings is predicted – based on evidence-based pathfinders and trials.

\$100 m of savings for families over the next 10 years, resulting from the money saved on fuel or parking charges.





Waste management

- 12 UK Local Authorities achieving cost savings of **\$5.5m** per year
- Saving between 50-120 tonnes each of CO2 per annum
- Cutting fuel consumption by 12-15%
- Some showing a recycling rate doubled to 65%.



Coordination of utility roadworks

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What's on this map

- Live incidents
- Road closures and diversions
- Traffic restrictions
- Roadworks
- Public events

Date filter:
Today

[Customise my map](#)

Roadworks, delays possible

16 Feb - 24 Feb
A3211 Upper Thames Street, London, City of London

Responsibility for these works

UK Power Networks

Information for Road Users

Location: A3211 Upper Thames Street, London, City Of London
Traffic lights, etc.: Some carriageway incursion

Information for Operational Teams

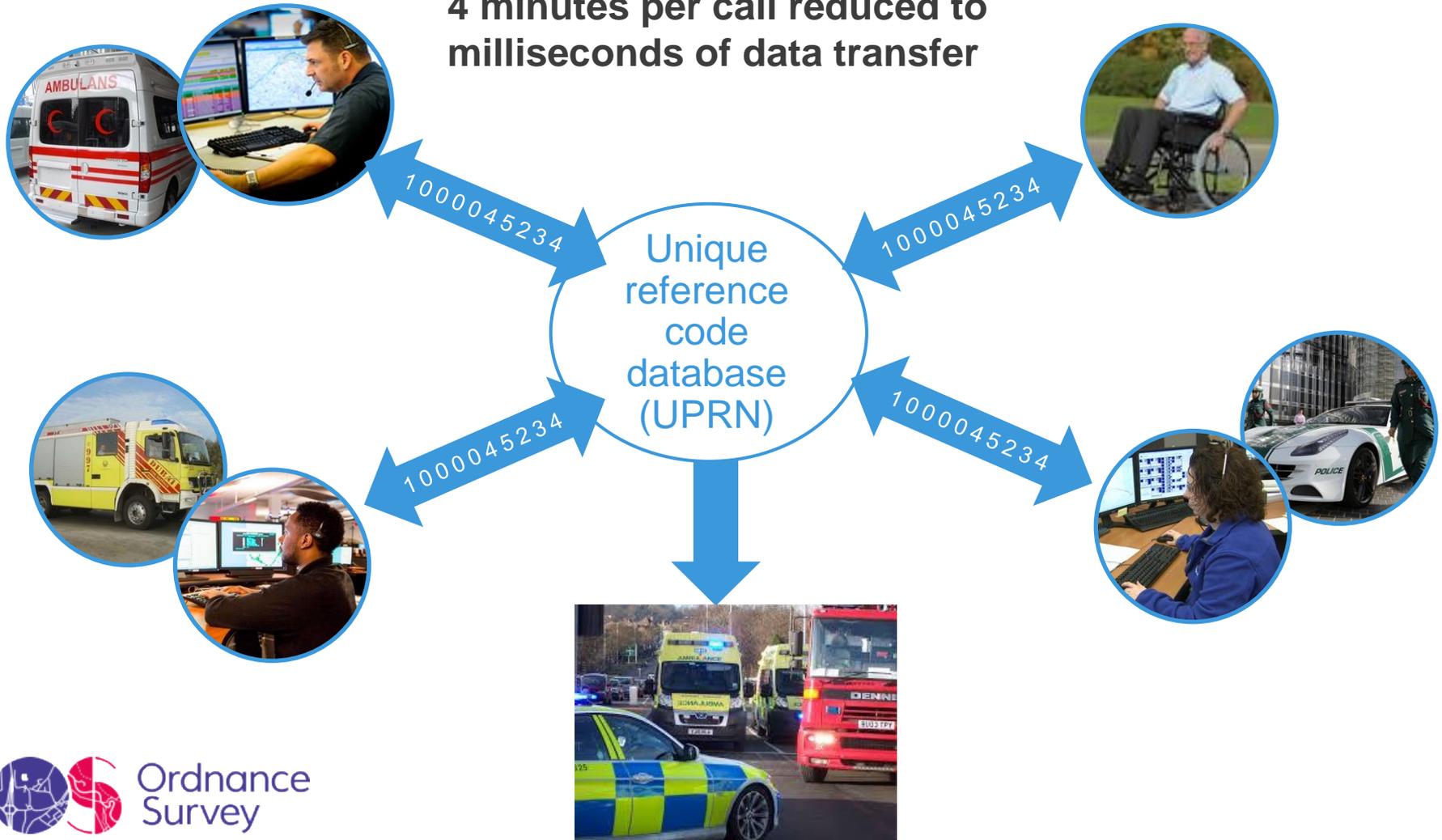
Highway Authority: City of London Corporation
Location: A3211
Description: Network Operations

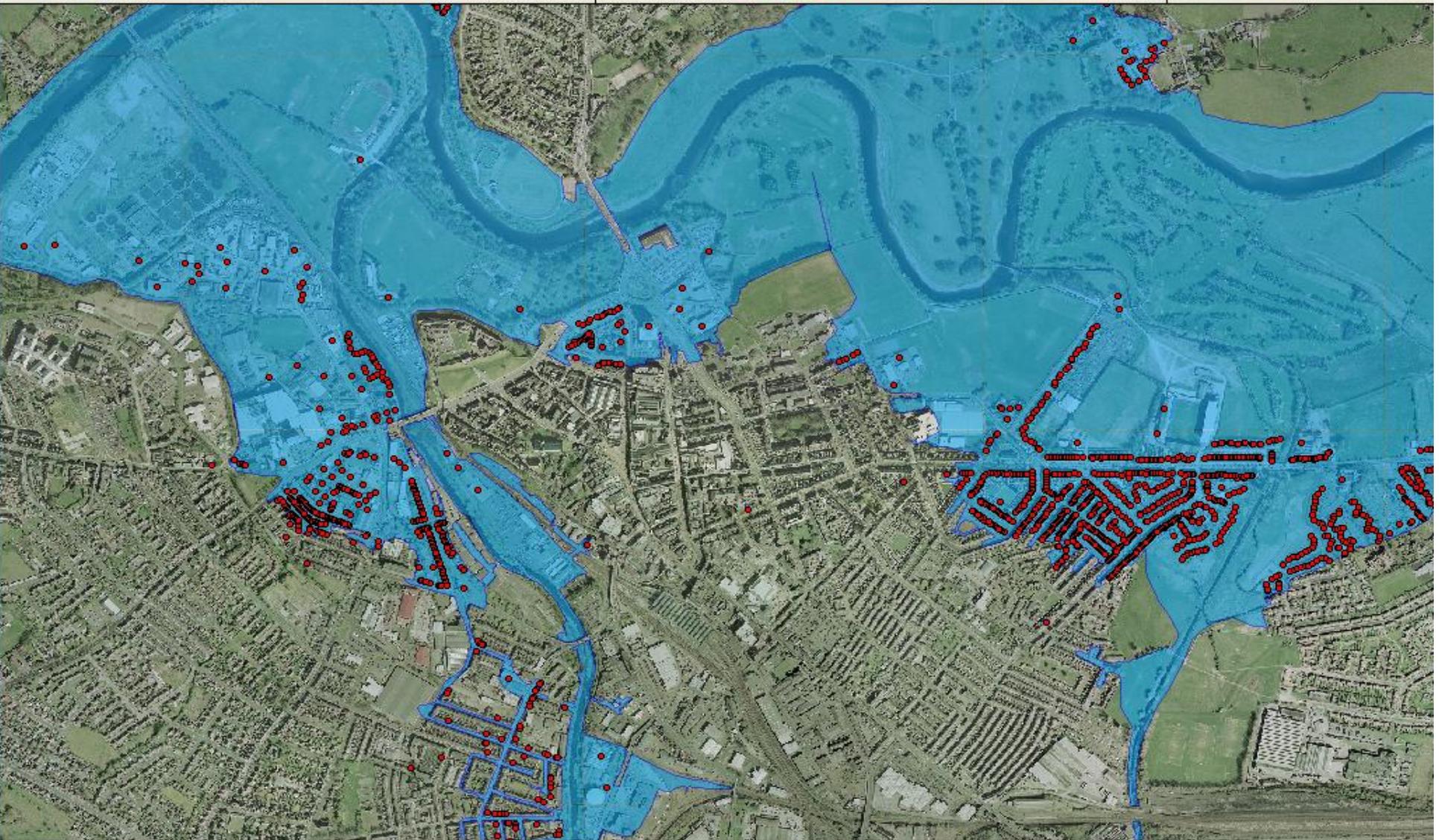
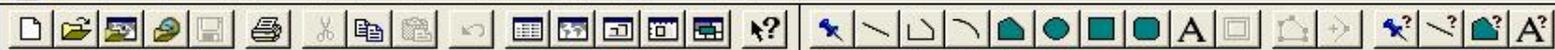
16:41
16/02/2016

Incident location sharing for Emergency Services

Saving 18,000 hours per annum

**4 minutes per call reduced to
milliseconds of data transfer**





Zoom: 3,589 km Editing: PoW Selecting: None

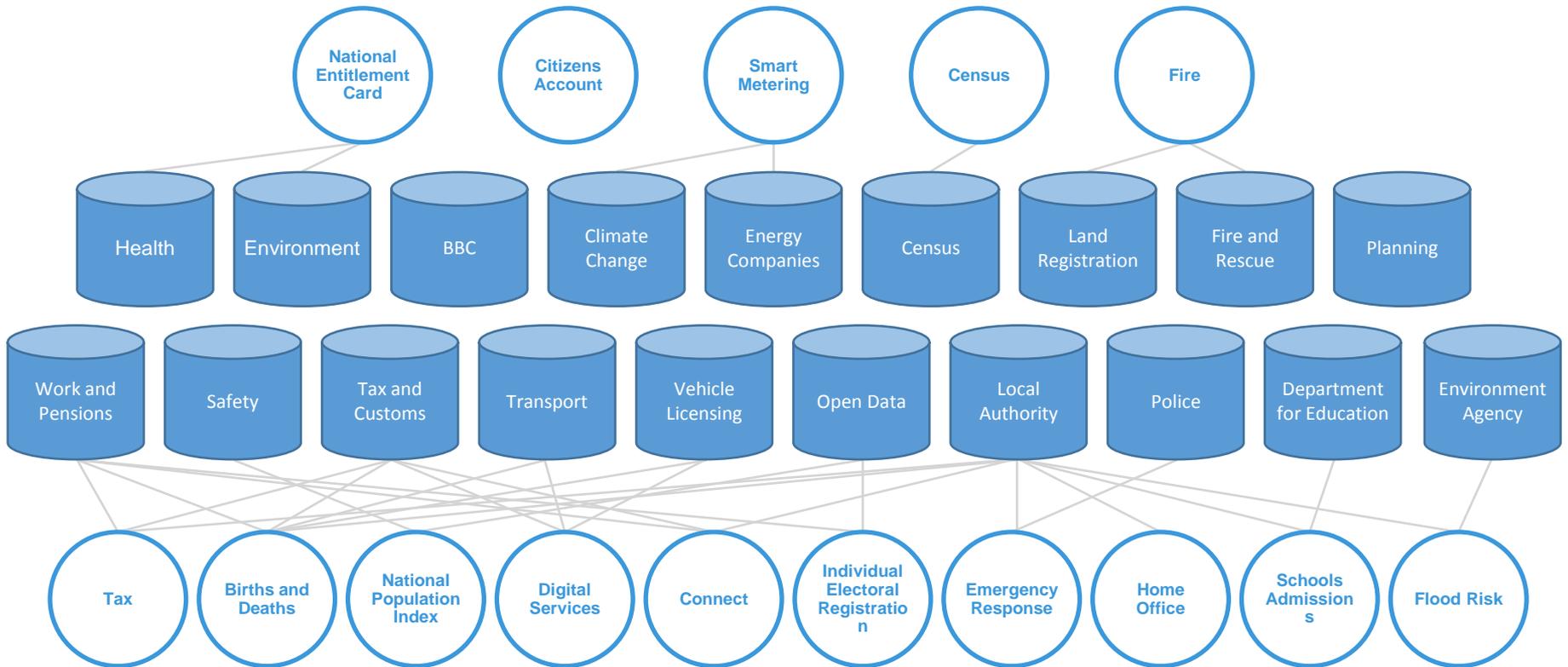
Resilience Mapping

Everyone seeing the same information at the same time



Definitive Spatial Reference

As used by UK government initiatives



Savings made UK public sector using spatial data



Gloucestershire County Council saves \$3m on tendered bus services



East Riding of Yorkshire saves \$1.5m on school transport



Harrow Council's waste project saves \$4.8m over 10 years



Automated bus pass allocation project saves Liverpool \$75k



The Suffolk Waste Partnership saves St. Edmundsbury \$27k



North Somerset District Council saves \$1m on school transport



Lee Valley Regional Park Authority saves \$150k on grounds maintenance



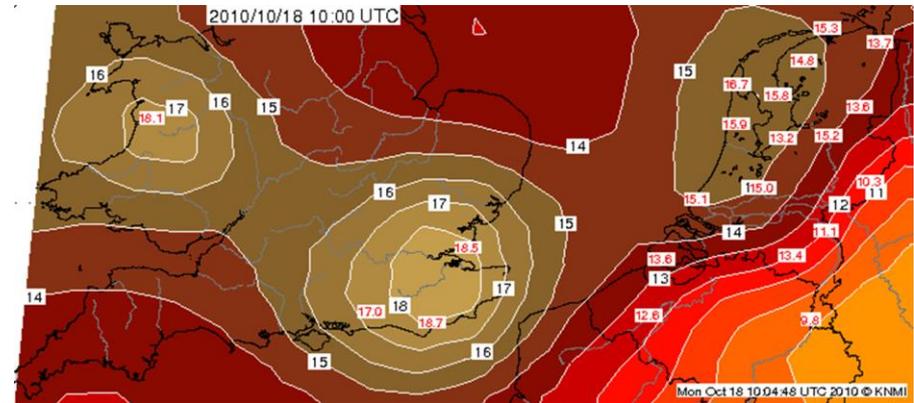
From 2002, London Borough of Sutton saves \$70k yearly on SEN transport

OS Net- CORS Network

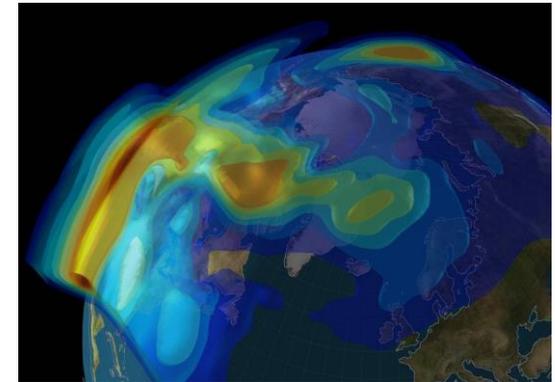
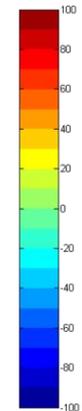
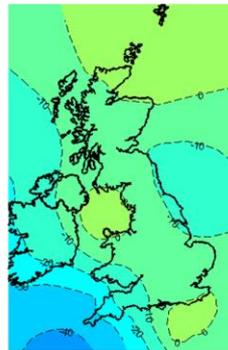


OS NET data supports a wide range of business activity and academic research

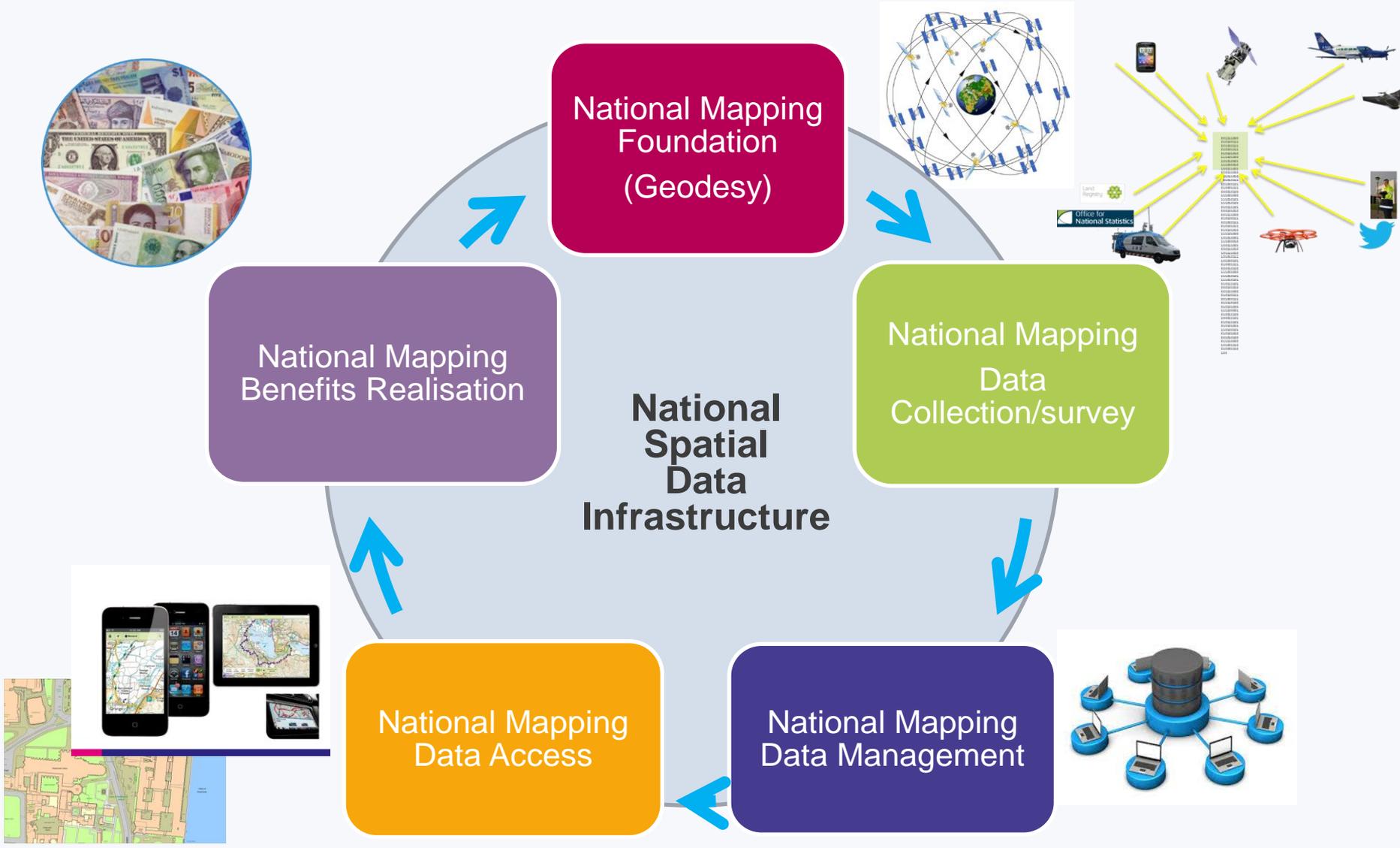
- Weather models
- Highways accident surveying
- Coastal monitoring & engineering
- Geology
- Integrated systems
- Long-term regional vertical land movement
- Meteorology & atmospheric studies
- Environmental monitoring, flood risk
- Wildlife & biodiversity
- Space studies (eg interferometry & altimetry)...



UK Ocean Tide Loading: Jan.17,2000 00:00:00



The National Mapping Process



Economic Benefits of Spatially Connected Government

- Ordnance Survey data underpins **\$113bn** of Great Britain's economy
Source- OXERA
- For every **\$1** spent on address and street spatial data **\$4** is saved

Source-

Geoplace

- Across the 15 most commonly built applications using data from the UK single data framework, research shows that UK local authorities, police forces and fire services are already saving over **\$187 million** every year
- If a majority (75%+) of local authorities and emergency services were to implement just these 15 most popular applications, savings would rise to over **\$0.7 billion** each year.
- **0.2 to 0.6 GDP growth** in UK

Source- Mindmetre 2015



KEY BENEFITS OF SPATIALLY CONNECTED GOVERNMENT

- Easy exchange of information and open data between organisations and users through single location reference
- Best evidence for best policy creation and optimised (smart) front line public services
- Easier interaction with citizens- better public services and happier citizens
- Cost, time and environmental savings

Thank you

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Ordnance Survey