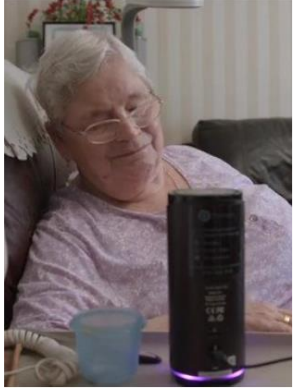# Liverpool 5G Create – Connecting Health and Social Care

Why the Liverpool 5G Project?
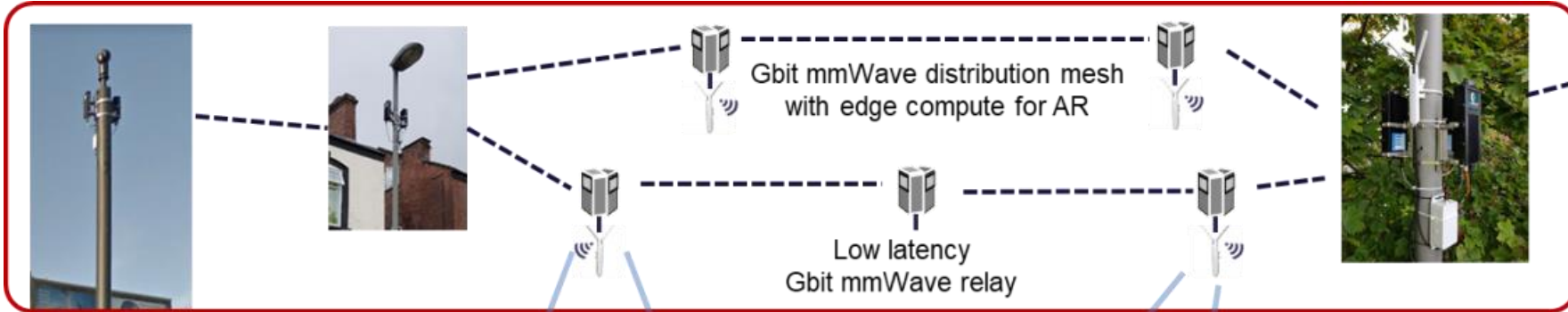# What problems are we trying to address?

- There are many **barriers to the adoption** of technology in health and care services. **Access to affordable, reliable connectivity is a key barrier.**

- Digital programmes have increased the quality and responsiveness of services but have not generated significant cash savings.

- Why? Increased use of remote tech leads to **increased data charges** meaning a larger proportion of H&SC budgets are spent on connectivity – we have no control over pricing.

- The current pandemic has led to an increase in remote services but has also highlighted the impact of **Digital Poverty** on **Health Inequalities**.

- By 2025, **analogue telephone services will be switched off** as the UK's telecoms infrastructure is upgraded to digital connectivity. Major implications for the 1.7 million people who rely on telecare in the UK.

www.liverpool5g.org.uk

Technical Solution

Liverpool 5G Create: Connecting Health and Social Care

- This is a CCTV Camera pole with a small cell and MM wave

Benefits of deploying a Municipal 5G Network

5G Fixed Wireless

Deliver internet access to community groups that would not otherwise be able to afford it.

3 Products work together to improve return on one common infrastructure

Private 5G

Secure, high speed networks for Industrial & Municipal use.

Neutral Hosting - Coverage Improvement

Delivers community benefit & significant revenue stream

Fixed Wireless - internet access to support the community - e.g. education, care leavers, job seekers.
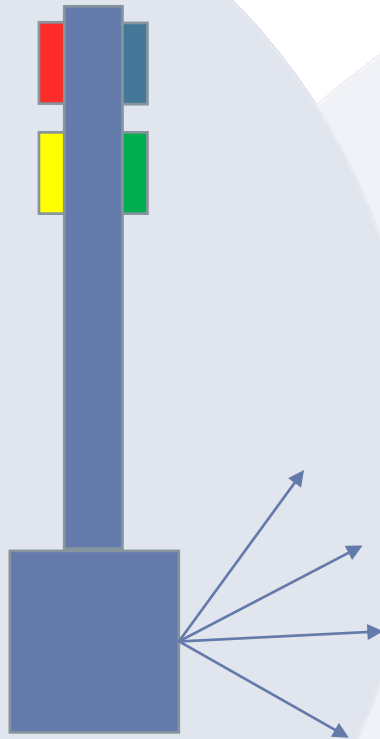
Private 5G Networks - transport, social care, logistics.

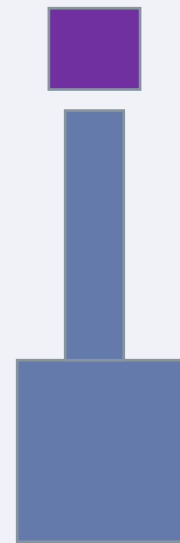Supports internet access - health and social care provision.

Neutral host - coverage improvement, reduction in street furniture, makes it easy for MNOs to deploy.

)) telet ((

5

What is Multi-Operator Neutral Host? (MONeH)

Telet: Single radio on our spectrum

Radio mounted on rural ISP mast, building, etc. Uses ISP backhaul.

Subscribers connect to home network via roaming agreement (Local Roaming: Big MNO traffic can Roam into Telet)

GSMA Standard settlement & agreements

Avoids the pitfalls of "national roaming" because – by definition – we only exist in the location & spectrum that the MNOs do not

JOTS / Shared Infrastructure "Neutral Host"
TowerCo provides Tower, Backhaul
4x Operator Equipment broadcasting on their Spectrum

"Local Roaming"

))telet ((

New generation base-stations are initially bulky but flexible
Maturity brings better 'integration' (more on silicon) with lower power consumption and smaller size

DCMS' 'Future RAN (FRANC) projects are developing UK suppliers
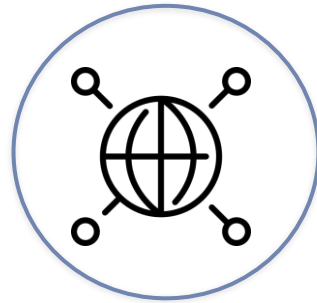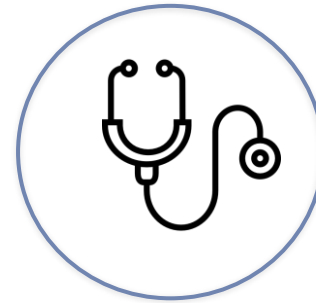
Key challenges we are addressing:

Many households do not have access to affordable, reliable connectivity

The digital divide has increased exponentially during COVID-19. The impact of Digital Poverty is widely recognised

The city region faces vast, complex health challenges, increasing health inequalities

Slow adoption of tech solutions in community and social care services

Increasing NHS and LA spend on connectivity within services

www.liverpool5g.org.uk

Contact us

Rosemary Kay
Project Director

rosemary@ehealthcluster.co.uk
07973 655043

Ann Williams
Commissioner and Contract Manager

ann.williams@liverpool.gov.uk
07515 500880

Liverpool 5G Create
www.liverpool5g.org.uk