



Transport for London

# Connected London

August 2021



bai communications

CONFIDENTIAL AND PROPRIETARY



**TfL: Garry Radcliffe – Commercial Lead**

**BAI: Andrew Conway – Director of Solutions & Innovation**

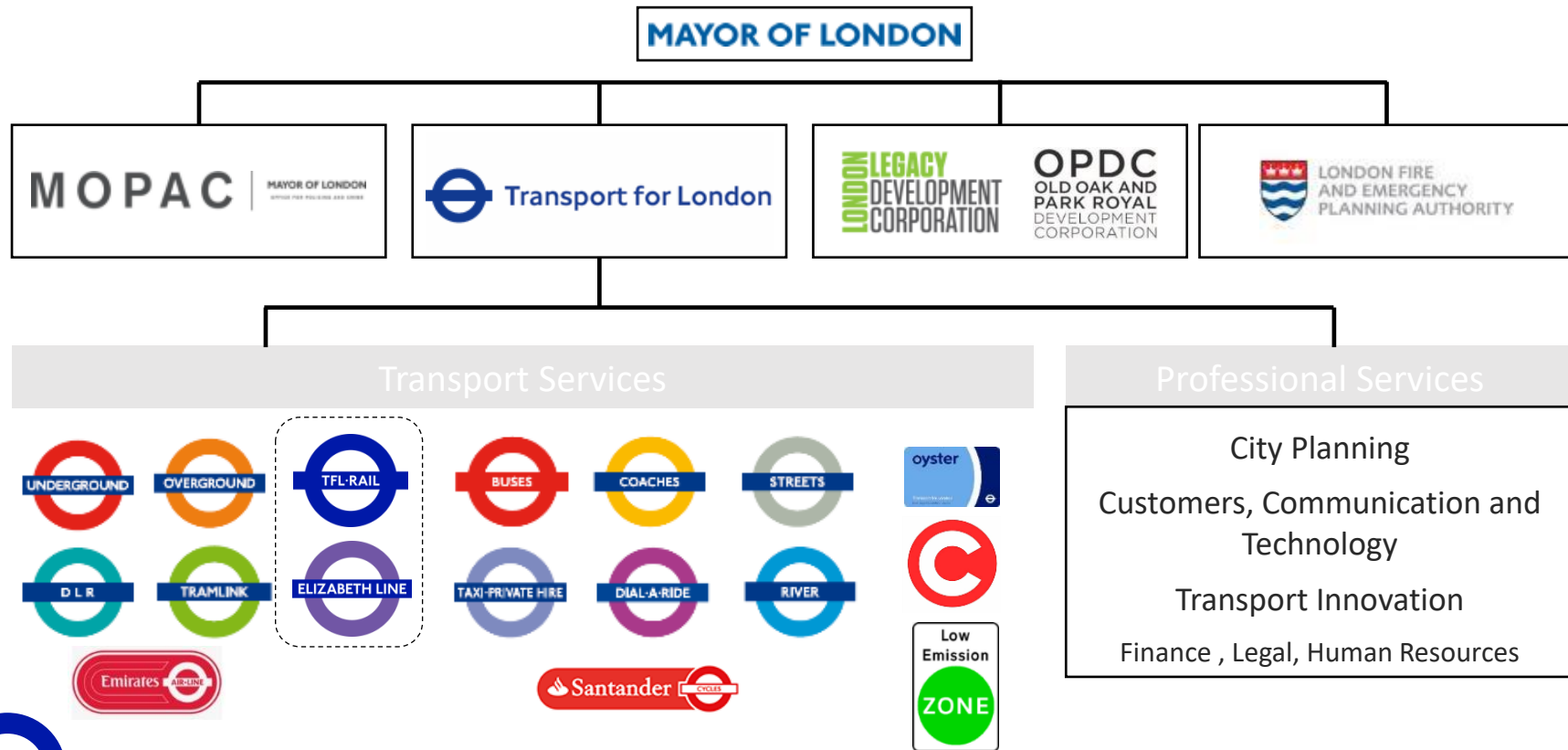
TfL has awarded **BAI** a 20 year contract to act as  
TfL's **Connected London** partner

In line with the Mayor's Transport Strategy TfL has procured a partner to use TfL's assets to improve connectivity across London

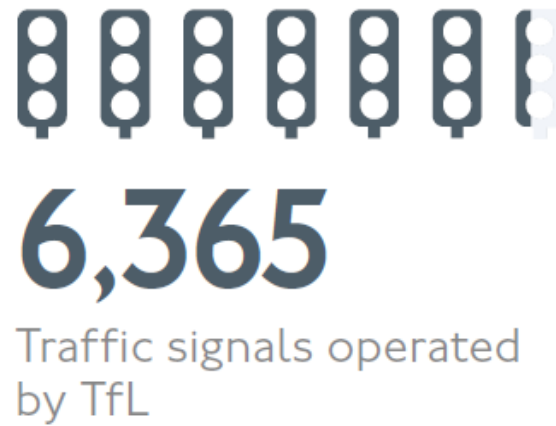
# Governance - The Mayor, through Transport for London, is responsible for most of London's transport



Deputy Mayor  
for Transport,  
Heidi  
Alexander



# TfL – Our Scale



EVERY JOURNEY MATTERS

# Two key factors for Getting Mobile Delivered on the Tube

## Commercial

- We understood that any partner investing needed a return on their investment and so we modelled their business case rather than our own
- We extended the scope to include all assets, this also maximises the connectivity improvements
- We ensured fair access for all
- We contracted for the long term with a partner with similar ambition
- Solution had to be at no cost to TfL

## Technical

The focus was on reducing risk:

- The successful pilot delivered connectivity on the Jubilee line and reduced technical risk
- Time pressure was reduced by enabling works with nearly 400 km of leaky feeder and 65 stations cabled up already
- Partnership with the Home Office



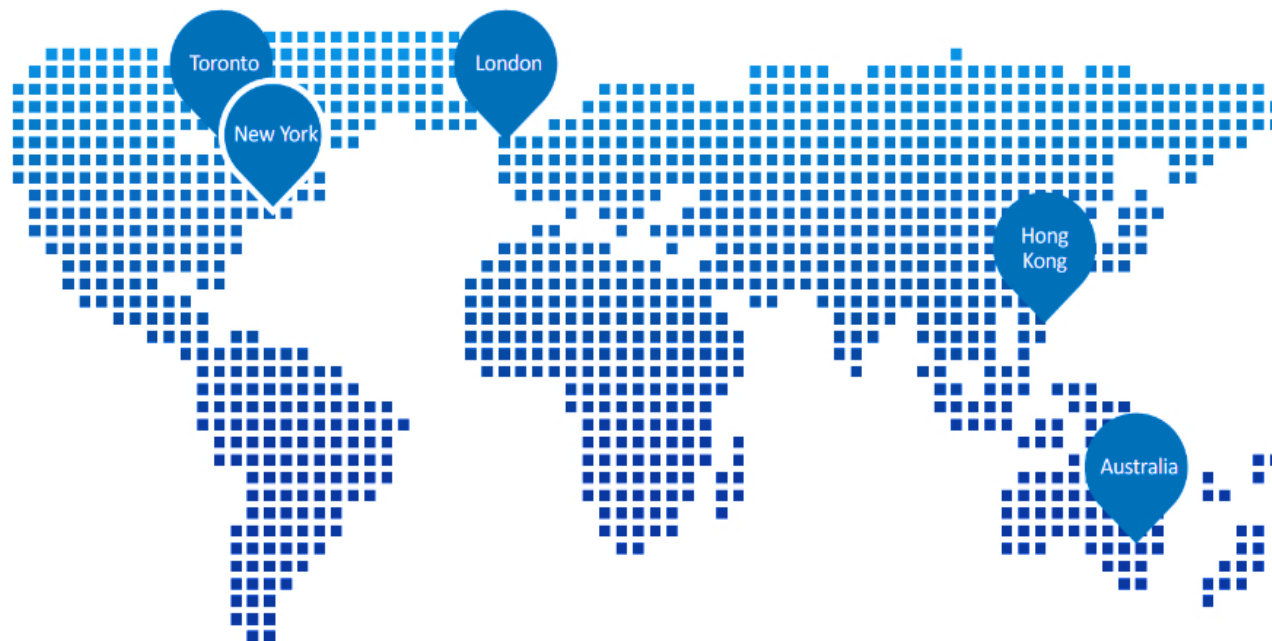


# BAI Communications | Who are we

## Key figures

- **+100 years operating** in communications
- Majority owned by **CPP Investments** since 2009
- Global reputation of **engineering excellence**
- **Tier 1** partnerships, vendors and supply chain
- **4bn passengers'** connections each year
- Communications networks in **400+ subway stations and tunnels**
- We operate on a **wholesale model** basis

## Our footprint and portfolio of activities



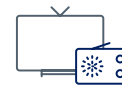
Small cells, tower  
and fibre  
backhaul



Edge Data  
centres, Smart  
City & IoT



Transport  
connectivity



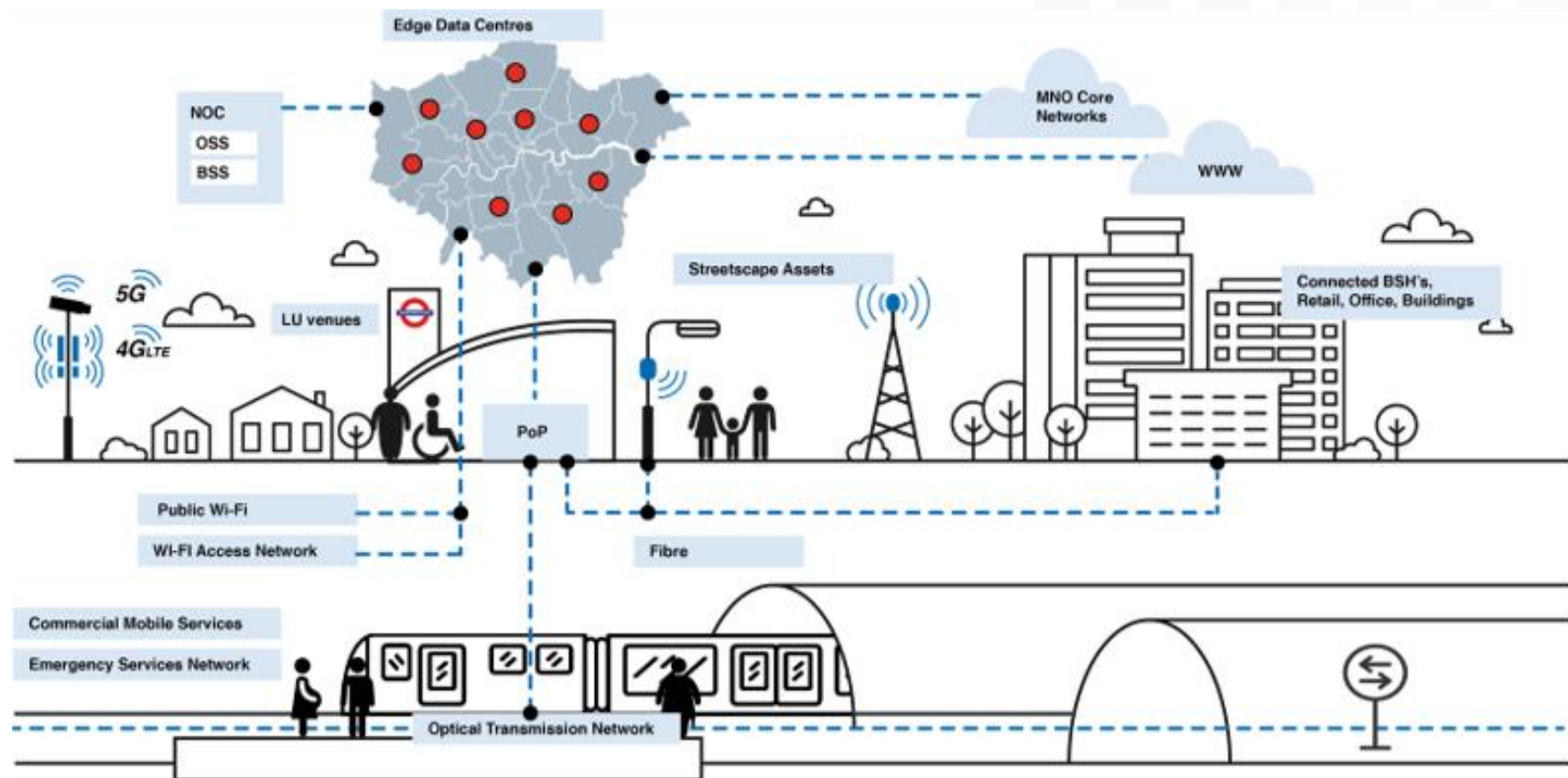
Television and  
radio  
broadcasting



Public safety  
communications  
networks

# BAI Communications | London's Digital Footprint

£1Bn+ of new infrastructure capable of accelerating and optimising the digital footprint in London

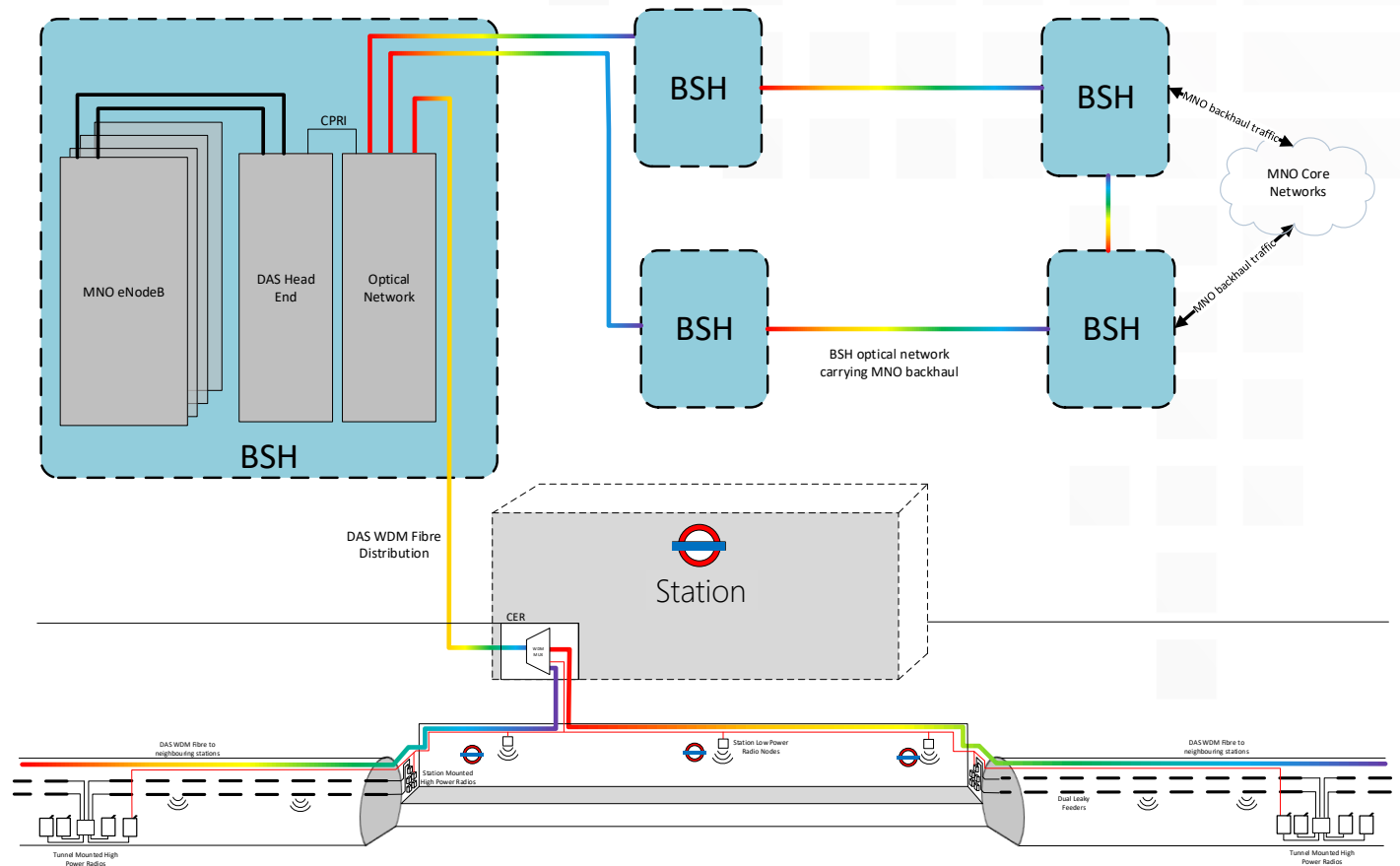


# BAI Communications | Technology on a Page

## Key aspects

- **Digital DAS system**
- All **technologies supported**
- MNO equipment housed in edge Data Centres / **Base Station Hotels** off TfL premises
- Coverage provided in **tunnels** via radiating cable / 'leaky feeder' solution

## Topology





# BAI Communications | Connected London

## Mobile coverage in stations & tunnels

- Neutral Host services throughout 136 stations, platforms and 200km tunnels
- Emergency Services Network rollout



## TfL Public Wi-Fi

- Take on existing London Underground Wi-Fi service delivering Wi-Fi access to all stations, platforms and ticket halls



## +200km dense underground fibre

- +200kms of dense fibre running through the London Underground



## 80k Small Cell locations

- 80k premium TfL assets incl. LU stations, lampposts, CCTV poles, traffic signals and bus shelters
- Prime ducting routes



## 12 Edge Data Centres

- Base Station Hotels in 9 locations across the city
- Cross connections into 3 Major London Data Centres



## 24x7x365 NOC

- Fully managed 24x7x365 to support the mission critical nature of the network
- Service management and insights

## Outcomes

- Resilient fixed and mobile coverage solutions, giving customers a great network experience
- A new alternative fibre backbone in London providing connectivity and a smarter city





Thank You