

# 5G Innovation Workshop: 15 June 2021

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**TECHNOLOGY  
IS  
GREAT**  
BRITAIN & NORTHERN IRELAND



# UK Tech Headlines

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- UK Tech start-up and scale-up ecosystem: **\$585bn** (120% up from 2017 and now double 2<sup>nd</sup> placed Germany)
- UK companies raised a record **\$15bn** in 2020 behind only the USA and China
  - more than Germany AND France combined
- 90+ unicorns across the UK with 132 futurecorns
  - UK is on track to have a total of 223 unicorns within the next decade
- Significant growth across **Deep Tech, Ed Tech, CreaTech, Health Tech, Agri Tech, Net zero and Mobility Tech**

**UK is a significant market opportunity for inward investors**



# 5G in the UK

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- Roll-out continuing at a steady pace
- Providers focussing on coverage in locations where there's already a high demand for mobile provision
- 5G is now available in 300+ British towns and cities
- Most consumers will upgrade at some point
- Some impact following false conspiracy theory rumours about health impacts – including Covid-19!
  - Attacks on 159 base stations associated with anti-5G sentiment during 2020



**UK  
5G**

# Innovation Network

**UK5G** is an impartial 'network of networks' to facilitate, encourage and coordinate 5G activities across the UK.

## Aims:

1. Support the development of the UK5G ecosystem
2. Manage information about 5G activities and learning
3. Promote the capabilities of UK 5G internationally



**UK  
5G** Innovation  
Network

**CW** CONNECTING  
THE DIGITAL  
WORLD



tmforum



# 5G Testbeds and Trials Programme (5GTT)

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- Harness areas where the UK has a competitive advantage: scientific research, engineering talent and technology businesses
- Exploring the benefits and challenges of deploying 5G technologies in line with the following key objectives:
  - 1. Accelerate the deployment of 5G networks and ensure the UK can take early advantage of the applications those networks can enable**
  - 2. Maximise the productivity and efficiency benefits to the UK from 5G**
  - 3. Create new opportunities for UK businesses at home and abroad, and encourage inward investment...**







Department for  
Digital, Culture,  
Media & Sport



DCMS  
SUPPORTED  
5G TRIALS



URBAN TESTBED  
West Midlands 5G



RURAL PROJECTS



INDUSTRIAL,  
MANUFACTURING  
& CONSTRUCTION



HEALTH &  
SOCIAL CARE



CREATIVE,  
MEDIA & SPORT



MOBILITY, PORTS  
& LOGISTICS



TELCO SUPPLY  
CHAIN  
DIVERSIFICATION



14	A	D	C	E	F	11
INNOVATION CENTRES	5G RURALFIRST (COMPLETED)	WORDESTERSHIRE 5G (COMPLETED)	LIVERPOOL 5G TESTBED (COMPLETED)	5G SMART TOURISM (COMPLETED)	AUTOAIR (COMPLETED)	NEC NEUTRORAN
14	B	1	7	6	3	21
INFRASTRUCTURE ACCELERATION	SGRIT (COMPLETED)	5G-AMC <sup>2</sup>	5G LIVERPOOL CREATE	LIVE AND WILD	5G RAIL NEXT	SMARTAIR OPEN NETWORK INNOVATION CENTRE
14	2	4	13	17	8	
TRANSPORT	5G NEW THINKING	5G-CAL	WEST MERCIA RURAL 5G	5G EDGE-XR	SMART JUNCTIONS 5G	
14	5	8		19	15	
HEALTH & SOCIAL CARE	MANY	5G FACTORY OF THE FUTURE		GREEN PLANET AR	MILTON KEYNES 5G	
14	10	15		20	18	
MANUFACTURING	5G CONNECTED FOREST	SGEM UK		PROJECT VISTA	5G PORTS	
	12	27		22	26	
	5G WALES UNLOCKED	5G-ENCODE		5G FESTIVAL	5G LOGISTICS	
	24			23		
	5G RURAL DORSET			CONNECTED COWES		
	25			28		
	MONEH			EDEN UNIVERSE		

# UK5G by numbers

- 1 x Advisory Board
- 8 x active board working groups:
  1. Local Enterprise and SMEs
  2. Manufacturing
  3. Connected Places
  4. Creative Industries
  5. Testbeds and Trials
  6. Security
  7. International
  8. Climate and Environmental [being created]
- 4000++ registered users | 1600+ organisations
- Fortnightly newsletters & active social media
- 700+ articles, resources & case studies
- 200+ events, promoted supported or delivered per annum
- Inter-project collaboration coordinated
- Quarterly UK5G Innovation Briefing magazines
- DCMS competitions and policy initiatives supported



Order your own hard copy of the UK5G magazine through your personal dashboard on [UK5G.org](https://www.uk5g.org)



# 5G Create

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- **9 projects** to receive funding as part of a £28.3m investment to test how the country can seize the full benefits of 5G help British industries capitalize
  - Department for Digital, Culture, Media and Sport (DCMS): £15.2m
  - Project partners: £13.1m
- **Open Competition**
  - Projects can apply for project funding from £250,000 to £5m







# 5G Supply Chain Diversification Strategy

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## 3 key areas of activity

1. *Supporting incumbent suppliers to ensure their resilience and ability to supply the market in the near term, while supporting their transition into the emerging market structure*
2. **Attracting new suppliers into the UK market to build resilience and competition**, prioritising deployments that are in line with our longer-term vision
3. *Accelerating open-interface solutions and deployment so that we are not reliant on any single vendor and begin to realise our long-term vision for a more open and innovative market*



# The Northern Powerhouse (NPH)



11 Regional Partners

8 Tech & Creative “Clusters”

1. Hull
2. Leeds
3. Liverpool
4. Manchester
5. Middlesbrough
6. Newcastle
7. Sheffield
8. Sunderland





# Opportunities in the Northern Powerhouse

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15m people and 1m businesses = **market opportunities**



*Technology, Digital and Creative*



# “Northshoring” (pre Covid-19)

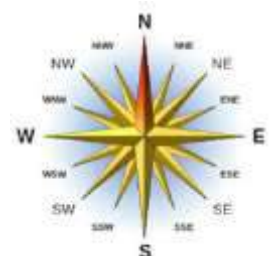
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66% of businesses believed **London’s housing market was having a negative impact** on the recruitment of entry-level staff\*

44% of companies **offered premium wages or retention payments** to attract staff, noticing how many of their employees were moving out of London when they hit 30\*

Average 1<sup>st</sup> time buyer now needs a salary of £100,000 to buy a 2–3 bedroom home (Newcastle: £32,000 Liverpool: £28,000)\*\*

Deloitte offers 43% of graduate opportunities outside London - a 12-point increase year on year\*\*\*



\*CBI survey in April 2018 \*\* research by Hometrack \*\*\* The Guardian “How the north of England got its groove back” May 2018

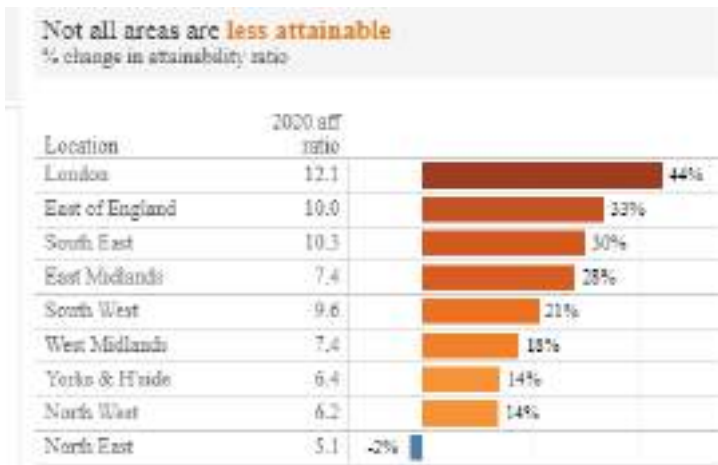




# Is the future regional?

## House price X salary ratio

- Will migration surge North?
- Increased student retention?
- Stay/live regionally but working remotely for London or Global companies?



### CAN YOU AFFORD TO GET ON THE LADDER?

	Average FTB house price	5% deposit
Great Britain	£208,340	£10,417
Inner London	£531,800	£26,590
London	£433,630	£21,682
Outer London	£380,060	£19,003
South East	£270,720	£13,536
East of England	£255,990	£12,800
South West	£224,260	£11,213
East Midlands	£175,420	£8,771
West Midlands	£171,380	£8,569
North West	£155,090	£7,755
Wales	£153,080	£7,654
Yorks & Humber	£152,830	£7,642
Scotland	£132,480	£6,624
North East	£118,120	£5,906

Source: Hamptons estate agency





# TalkTalk moves HQ from London

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- **Telecoms group relocated from London to Salford Quays**
- £1.7bn turnover company downgrading London to satellite office
- New HQ moves to where 1,500 of its staff are already based
- TalkTalk said the success of its Soapworks site in Salford had *"exceeded expectations, improving collaboration between teams, supporting a more flexible working environment and enabling the company to **attract and retain the best talent**"*





# 5G examples across the Northern Powerhouse

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- **Lancashire**
  - AMRC North West 5G Factory of the Future testbed
  - Lancaster University
- **Leeds**
  - Largest 5G-capable city outside London
- **Liverpool**
  - 5G Testbed: Healthcare in an urban setting
  - Europe's 1<sup>st</sup> dedicated 5G health & social care pilot
- **Manchester**
  - Vodafone was the 1<sup>st</sup> company in the UK to carry full 5G over a commercial network – at MediaCityUK (October '18)
  - Manchester Airport 1<sup>st</sup> in UK to offer 5G

# Opportunities

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Companies want to be **'world-class'** and actively welcome international inward investors...







# Department for International Trade – we can help you !

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- DIT has a presence in 108 countries worldwide
- 1,200+ staff throughout UK
- Experienced sector & location consultants
  - bank accounts, visas, tax, virtual offices, funding, co-working spaces, talent...
- Grow and access export markets from your UK base
- **Soft-landing, virtual offices and WFH**
- **It's FREE and confidential**





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**NORTHERN** 100  
**POWERHOUSE** UK Government

