Horizon Europe SNS JU Brokerage event

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Digital Catapult - the UK authority on advanced digital technology.

Our mission is to accelerate industry adoption of advanced technologies, driving growth in the UK economy.

We create new opportunities through collaboration and innovation.

WHAT WE DO:

Deliver specialised **acceleration** and **innovation programmes** aligned to industry challenges and themes

Build **testbed facilities**, run **pilots** and **proof of concepts** and test new **business models**

Facilitate **R&D projects**, inform **policy recommendations** and **lead research** on emerging tech trends

WHO WE WORK WITH:

Government & public sector

Startups & scaleups

Corporates and industry

Investors

Academia

Catapult network

We break down barriers, de-risk innovation, and responsibly shape the products, services and experiences of the future.
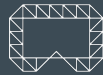
Virtual environments

Supply chains

Digital infrastructure

Future Networks – 5G - IoT

Immersive technologies

Artificial Intelligence and machine learning
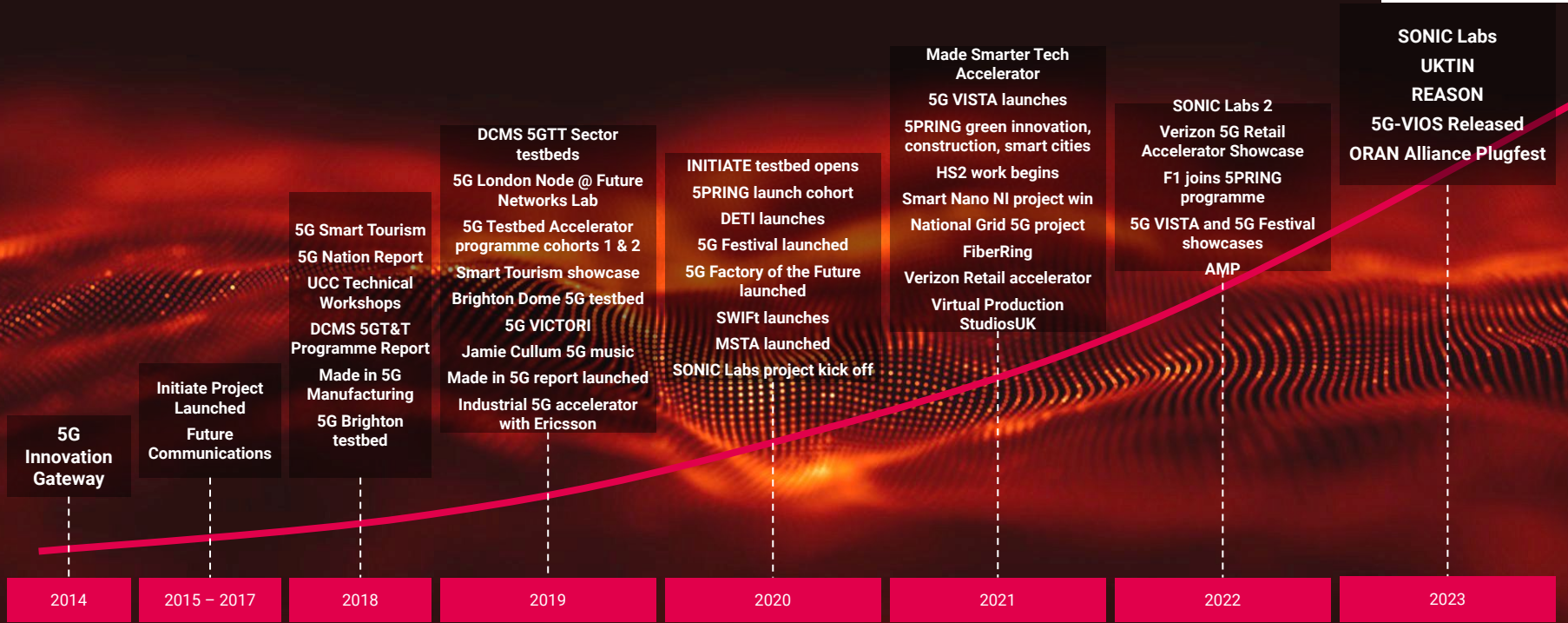
Distributed ledger technologies and distributed solutions

Quantum technologies

Our Track Record in Future Networks / Telecommunication Systems Digital Catapult

£48m to date

SONIC Labs
UKTIN
REASON
5G-VIOS Released
ORAN Alliance Plugfest

Made Smarter Tech Accelerator
5G VISTA launches
5PRING green innovation, construction, smart cities
HS2 work begins
Smart Nano NI project win
National Grid 5G project
FiberRing
Verizon Retail accelerator
Virtual Production StudiosUK

SONIC Labs 2
Verizon 5G Retail Accelerator Showcase
F1 joins 5PRING programme
5G VISTA and 5G Festival showcases
AMP

DCMS 5GTT Sector testbeds
5G London Node @ Future Networks Lab
5G Testbed Accelerator programme cohorts 1 & 2
Smart Tourism showcase
Brighton Dome 5G testbed
5G VICTORI
Jamie Cullum 5G music
Made in 5G report launched
Industrial 5G accelerator with Ericsson

INITIATE testbed opens
5PRING launch cohort
DETI launches
5G Festival launched
5G Factory of the Future launched
SWIFt launches
MSTA launched
SONIC Labs project kick off

5G Smart Tourism
5G Nation Report
UCC Technical Workshops
DCMS 5GT&T Programme Report
Made in 5G Manufacturing
5G Brighton testbed

Initiate Project Launched
Future Communications

5G Innovation Gateway

| 2014 | 2015 – 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 |

Telecoms @ Digital Catapult
- 70 staff - specialised technical / innovation / industry / policy experts
- 30+ 5G/telecoms infrastructure projects
- Funding stands at £48m (in a £215m consortia funding envelope)

Telecoms @ Digital Catapult
- Never working alone - 200+ partners.
- SONIC Labs - Telecoms Interoperability Testing - £21M
- UK Telecommunications Innovation Network (UKTIN) - 10M

National Centre of Excellence in Telecommunication Systems Innovation

CATAPULT Digital

200+ partners
A neutral partner working across the ecosystem

4 Leading National Initiatives in telecoms

30+ cutting edge and award winning projects since 2015

650+ organisations engaged through accelerator programmes

Trusted ecosystem coordinators

SONIC Labs Internationally renowned Open Networks Centre

Trusted government tech advisor

2 Taskforces On Telecomm Systems

Unique team 30+ technical experts at the core of telecoms

14 5G Testbeds across the UK

£48M in CR&D and commercial income to DC

30% of DC staff in telecoms projects

52% of the DC CR&D income in 2023

Research focus and expertise

- **STREAM-B-01-01: System Architecture**
  - Open Network Architectures, focusing on Native-AI, Open and disaggregated networks
  - Task/Intent Oriented Network & Service Orchestration with focus on inter-domain / federation and network Automation
  - Elasticity and observability, Multi-Access Edge Computing and data continuum
- **STREAM-B-01-02 Wireless Communication Technologies and Signal Processing**
- **STREAM-B-01-03 Communication Infrastructure Technologies and Devices**
  - Future Open Network Testing and Validation
  - x/rApp Development and Validation
- **STREAM-B-01-08: Reliable AI for 6G**
  - Native-AI networks with focus on verifiability and trustworthiness
  - Ethical & responsible AI, Digital Twining
- **STREAM-D-01-01: SNS Large Scale Trials and Pilots (LST&Ps) with Verticals**
  - Use Case development, demonstration and business evaluation
  - Unique capabilities in Virtual Production/Immersive, Manufacturing, Smart Cities, indoors and outdoors demos
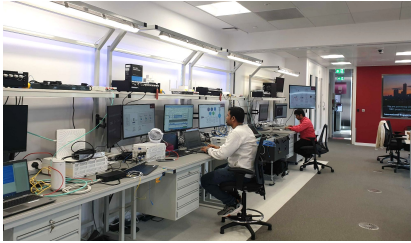
Research Facilities / Testbeds

- **5G SA Indoor and Outdoor** Open RAN field testing network:
- **Indoor (1000 sqf)**: 9 Radio Units (RUs), 3 Distributed Units (DUs), Centralised Unit (CU), Near Real RIC and SMO.
- **Outdoor (1.5km)** two macro RUs, 14 micro RUs, two DUs (in Fulham) and four DUs in Parsons Green.
- **Private cloud** distributed across 3 sites with: 10G L2/L3 interconnections, 40+ DELL R750 servers
- State-of-the-art test **Test and Measurement (T&M)** platform with: *Data Traffic Emulator, UE Emulator, UE log analysis tool, RF Scanner, RU Emulator, Energy Monitoring tool, Core Network Emulator and RIC Tester.*
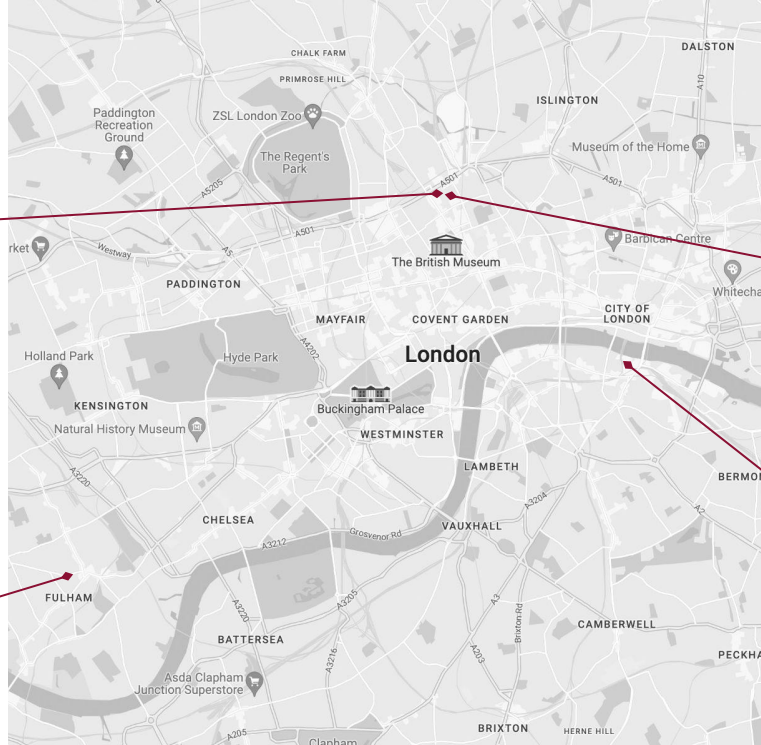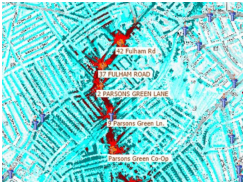

- 5G SA Indoor Testbed supporting **Virtual Media Production.**
- Geographically distributed but seamlessly Interconnected Virtual Production Studios more than 280 miles apart for collaborative work.
- **ORAN** based Private **5G Standalone (SA)** network which supports N78 as well as upper N77 bands, backed by an on-premises 5G SA Core.
- On premises **Edge Compute** infrastructure with **8x Nvidia A40 GPUs** for use cases requiring on-premises computational or GPU rendering.
- Supplementary **WiFi-6E** network.
- On-premises Firewall to secure the 5G SA and WiFi Networks.

SONIC Labs Facilities

SITE 1:
Testing Lab

SITE 4:
Outdoor Field Testing
(coming early 2024)

SITE 3:
Indoor field testing -
at Digital Catapult

SITE 2:
Ofcom Testing Lab

Flagship innovation & acceleration programmes

ADVANCED MEDIA PRODUCTION (AMP)

a network of interlinked virtual production studios in North of England and London enabling virtual content production and development of future technology application

SONIC (SmartRAN Open Network Interoperability Centre) Lab

a commercially-neutral, environment for testing interoperability and integration of open, disaggregated and software-centric network solutions and multi-vendor architectures.
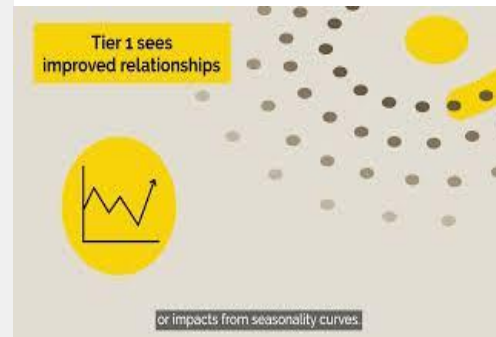

SMART NANO

Programme providing early stage businesses the opportunity to develop innovative products and services using new network technologies.

DIGITAL SUPPLY CHAIN HUB

A national programme which will advance and accelerate the understanding and inclusion of digital technologies in UK supply chains

For further info please contact us at:

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