



Department for  
Science, Innovation  
& Technology

# Government Interventions

## Telecoms & Digital Infrastructure

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# The Story So Far....

5G

Diversification

Adoption

Coverage

Research



# Background

- 2017-2022      5G Testbeds & Trials Programme  
To accelerate deployment of 5G networks  
140 5G user cases  
FRANC launched
- 2022-2025      Open Networks Programme  
Diversification  
Adoption  
Innovation

# The Open Networks Programme (2022-2025)

## Open Networks (Diversification)

Objective(s)

**Support development and de-risk adoption of open solutions in the radio access network (RAN) through R&D. Build the UK's standing in an international market.**

Budget

**£250m**

Intervention  
s

**45 R&D projects, 2 labs, 1 UK Telecoms Innovation Network ('front door')**

No. Orgs  
Funded

**150+ (UK wide)**

Funding  
Recipients

**Industry (SMEs, large vendors, MNOs), research orgs, unis, local authorities**





# Current ONP Competitions

Programme is made up of the following projects across the UK:

- **FRANC** - £30m to 13 projects with 56 project partners – DSIT funding closing.
- **FONRC** - £27m to 3 projects with 47 project partners – live until Mar 2025
- **ONE** - £90m to 20 projects with over 100 partners – live until Mar 2025
- **SONIC** – up to £20m until Mar 2025
- **UKTIN** - £11 million until Mar 2025



# ONE Competition

## Open Networks Ecosystem (ONE)

Three themes:

1. High Density Demand - HDD
2. RAN Intelligent Controller (RIC) & Software
3. RAN Hardware

- 20 Projects funded across the UK
- Over 150 organisations involved
- Approx. £90m deployed and match funded by another £66m
- Includes all MNOs and many global tech/telco organisations





# High Density Demand

## Objective:

- To get mobile network high density demand user cases & demonstrations
- HDD sites represent some of the most challenging MNO performance environments
- Examples include urban areas, sports venues, major public events etc.
- Projects look to optimise mobile network performance with software and hardware
- All MNOs involved in HDD trial deployments
- In delivery now until March 2025

# HDD Projects



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5G MoDE (HDD on wheels)

BEACH

CORE

DONE

Liverpool HDD

One Western O-RAN

SCONDA

REACH

Sunderland

Navigate







# HDD - Project Examples

## SCONDA – Small Cells OpenRAN in Dense Areas

- Project seeks to address challenges of HDD using open interoperable RAN architecture
- Centred in Glasgow and led by AWTG with consortium including Three
- SCONDA will build an ORAN network in Glasgow city centre, integrated into the Three UK Core Network, operating alongside traditional RAN
- Additional indoor test site at the University of Glasgow





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## Sunderland Open Network Ecosystem

The £5.7m 'Sunderland Open Network Ecosystem' (SONET) Project will transform the way we engage with live sports and esports.

Will showcase a highly efficient state-of-the-art HDD Open RAN solution at the Stadium of Light and the new British Esports Arena, with Boldyn Networks.

Project will develop the first UK Open RAN solution for users in HDD environments, bolstering network performance



# Digital Connectivity Infrastructure Accelerator (DCIA)/ Smart Infrastructure Pilot Programme (SIPP) (2021-2025)

## Digital Connectivity Infrastructure Accelerator 1 & 2

Objective(s)

**Reduce barriers to mobile infrastructure rollout by creating tools, contract templates for local authorities and operators. Phase 2- test the use of smart lampposts.**

Budget

**£11m**

Intervention  
s

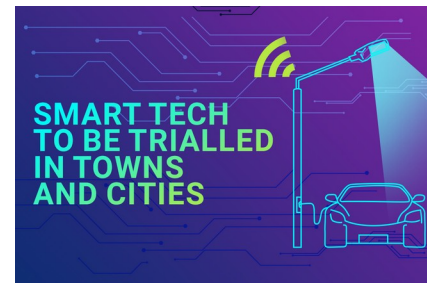
**8 DCIA projects + 6 SIPP projects**

No. Orgs  
Funded

**8 LA-led consortia (of 44 LAs) (DCIA) + 6 SIPP LAs**

Funding  
Recipients

**Local/combined authorities + Industry**





# 5G Innovation Regions (2023-2025)

	5G Innovation Regions
Objective(s)	Drive adoption of advanced connectivity by funding adoption of the technology. Focus on key sectors with local capability and opportunity.
Budget	£40m
Intervention s	10 5G Innovation Regions
No. Orgs Funded	74 (UK wide)
Funding Recipients	Local/combined authorities

## England's Connected Heartland

Announced as  
**5G Innovation  
Region  
Today**



# Rural Connectivity Accelerator (2023-2025)

## Rural Connectivity Accelerator

Objective(s)

**Research into use cases/ challenges for fixed/wireless rural coverage and opportunities for satellite to complement existing technologies.**

Budget

**£7m**

Intervention  
s

**Phase 1: Discovery (live now)  
Phase 2: Delivery**

No. Orgs  
Funded

**1 contract  
(4 organisations)**

Funding  
Recipients

**Satellite Applications Catapult + Industry**



# Ecosystem Development Benefits



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DSIT interventions have been successful in mobilising the ecosystem with over 150 partners including:

- All UK MNOs,
- Major vendors,
- Challenger vendors
- UK SMEs
- Global companies
- Local Authorities

Collaboration also facilitated by UK Telecoms Innovation Network (UKTIN) and events





# Outcomes



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- UK a global centre of telecoms innovation once again
- Industry convening and collaborating together
- UK telecoms job growth and demand increasing
- More telecoms PHDs than ever before
- Has attracted telecoms inward investment
- Back on the global telecoms stage.....but more to do



# The Future

- No Crystal Ball!
- Future Telecoms one of the UKs Five Critical Technologies:
  1. AI
  2. Quantum
  3. Semiconductors
  4. Bio Engineering/Tech
  5. Future Telecoms
- Policy teams working on a future telecoms vision TBD



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