



UKCRIC

UK COLLABORATORIUM
FOR RESEARCH ON
INFRASTRUCTURE & CITIES
**Inspired infrastructure
for better living**

Engaging with UKCRIC: An overview of UKCRIC facilities, clusters, scientific missions and systemic perspectives

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Brief Overview of UKCRIC



- Vision and Mission
- Facilities (Laboratories, Urban Observatories, and DAFNI)
- Partner Universities
- Industry Clusters (Work ongoing in industry clusters)
- Scientific Missions
- Skills and training
- Points of contact and sources of information (here today and online)
- Ways to go involved

- A world-class suite of infrastructure research facilities distributed across 15 UK partner universities
- National focus for Infrastructure & Cities research
- Multi- / trans-disciplinary and multi-application
- 3 strands: Laboratories, urban observatories, DAFNI
- 5 Industry Clusters
- 4 Scientific Missions

UKCRIC Open For Business



UKCRIC 'OPEN FOR BUSINESS' RESOURCES

A bright yellow L-shaped graphic element located to the left of the 'VISION' heading.

VISION

UKCRIC provides the transdisciplinary, systems-based research for the transformation of infrastructure and urban systems, enabling safe, resilient and sustainable living, and generating economic opportunities for the UK.

For more Details: <https://www.ukcric.com/about-ukcric/>

UK Collaboratorium for Research on Infrastructure and Cities



MISSION

UKCRIC's integrated research capability underpins the renewal, sustainment and improvement of infrastructure and cities in the UK and elsewhere.

By engaging government, industry, academia and end users, UKCRIC is de-risking, helping to prioritise, and providing evidence, analysis and innovation for future national infrastructure and urban investments in a safer, more resilient and more sustainable future.

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Partner universities

University of Birmingham

University of Bristol

University of Cambridge

University College London

Cranfield University

University of Edinburgh

Heriot Watt University

Imperial College London

University of Leeds

University of Loughborough

University of Manchester

Newcastle University

University of Oxford

University of Sheffield

University of Southampton

Affiliated facilities

V-Simulators labs at Bath and Exeter



UKCRIC Facilities



A full list of UKCRIC Facilities, more information about each, and the main point of contact for each can be found on our website at

[UKCRIC Infrastructure Laboratories Details and Contacts List](https://www.ukcric.com/facilities/)

<https://www.ukcric.com/facilities/>

[UKCRIC Urban Observatory Network Details and Contacts List](https://www.ukcric.com/facilities/)

<https://www.ukcric.com/facilities/>

[UKCRIC DAFNI Details and Contact](#)

National Network of Urban Observatories



**National Water &
Wastewater
Treatment Test
Facility, Cranfield**



**National Infrastructure
Laboratory, Southampton**



**National Green
Infrastructure
Facility,
Newcastle**



**National Distributed
Water Infrastructure
Facility, Sheffield**



**National Research Facility for Infrastructure
Sensing, Cambridge**



National Infrastructure Laboratory – Southampton



National Soil-Foundation-Structure-Interaction Laboratory – Bristol



National Buried Infrastructure Facility – Birmingham

National Centre for Smart Infrastructure & Construction – Cambridge



A suite of advanced infrastructure materials laboratories

Centre for Infrastructure Materials – Leeds

Advanced Infrastructure Materials Laboratory – Imperial College

Fire and Impact Laboratory for Resilient Infrastructure Materials – Manchester



**National Infrastructure Laboratory,
Southampton**



**National Buried Infrastructure
Facility, Birmingham**



**Person-Environment-
Activity Research
Laboratory, University
College London**

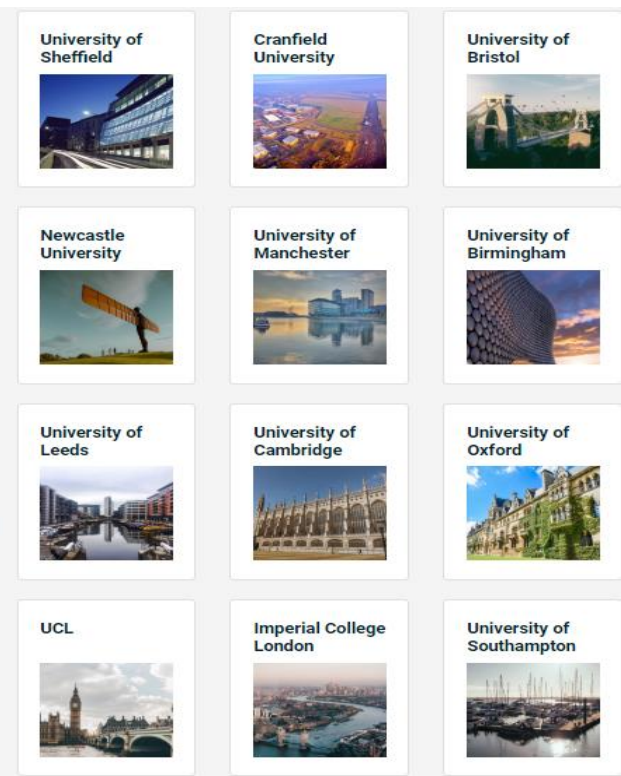
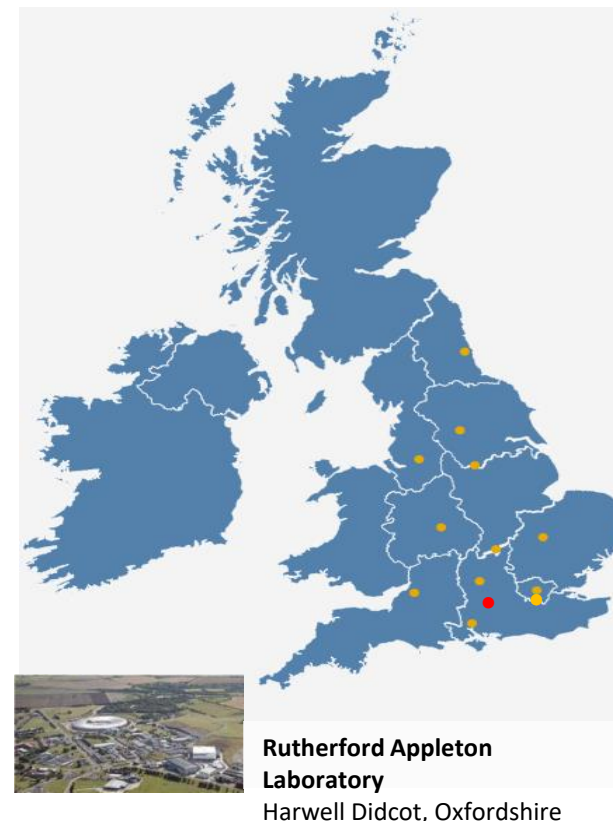
Supported by Materials and Sensing Laboratories, Observatories etc

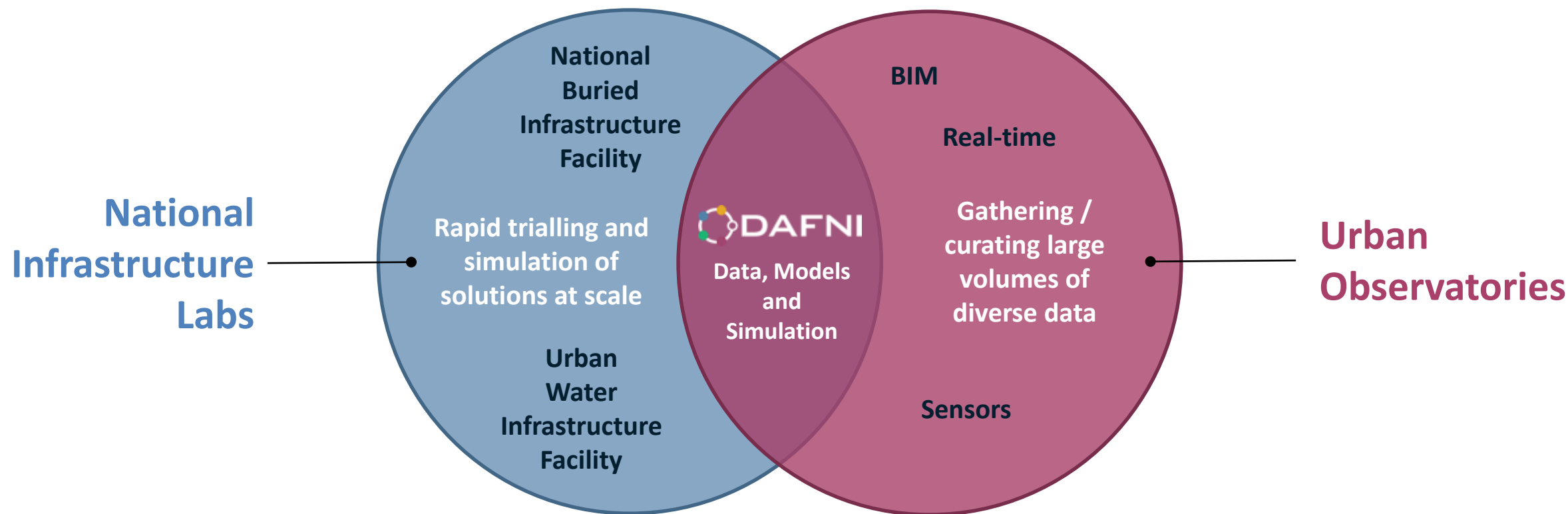
Providing a computing platform to improve decision making for national infrastructure

UK's next generation platform to support research into infrastructure decisions: planning, investment, design and operation.

- £8M investment 2017-2021 under the UKCRIC programme
- A Partnership of 12 partner universities
+ STFC as development and hosting partner

Leading to Partnerships between Academia, Government, Industry







UKCRIC Research Can also be grouped into Industry Clusters.

- **Energy systems**
- **Data-driven solutions**
- **Built Infrastructure**
- **Transport and mobility**
- **Water and environment**

Industry Cluster Presentations (downloadable PDF)

[Professor Chris Rogers: Built infrastructure](#)

[Dr Jennifer Schooling: Data-driven solutions](#)

[Dr Fleur Loveridge: Energy systems](#)

[Professor William Powrie: Transport and mobility](#)

[Dr Simon Jude: Water and environment](#)

UKCRIC Scientific Missions



My Interpretation

Infrastructure and urban systems for one planet living

Empowering society to thrive within the capacity of the planet through responsible consumption, resource efficiency and sustainable growth

Ownership, governance and business models for infrastructure and urban systems

Coping with greater system interdependencies, changing patterns of use and new, disruptive technologies whilst at the same time delivering social justice and affordability

Transformational infrastructure and urban systems for a changing world

Enabling infrastructure and urban systems to adapt to the challenges of climate change, changing patterns of use, societal expectations and emergent technologies

Infrastructure and urban systems as drivers of equity, inclusion and social justice

Forging healthy, happy and productive lives for all through urban design, planning, policy and infrastructure

A Sustainability Enhancing, Net Zero Enabling System

Enabled by Fit for Purpose Governance +++

A Systemically Resilient System that Enhances Societal Resilience

An Enabler of Societally Beneficial Outcomes

Skills and Training



UKCRIC, working closely with government and industry, will coordinate training enhancement activities to ensure that the UK becomes a global centre of excellence for infrastructure research training.

Through the [UKCRIC Doctoral Skills Network](#) and the [Centre for Postdoctoral Development in Infrastructure, Cities and Energy \(C-DICE\)](#) we offer doctoral students and early career researchers innovative and flexible training programmes with an ethos of responsible innovation and equality, diversity and inclusion (ED&I) at its core.

Multiple ways to work together



- Becoming an Associate Member
 - For learning
 - For insight from inter-disciplinary; systems thinking; knowledge and ambitions of the team
- Network Innovation—sponsoring a research stream, area, or project
- Framework Agreement—to commission research from across the whole of UKCRIC
- Direct commissioning of a facility or facilities
- Higher Technology Readiness Level (TRL) opportunities via **UKCRIC Ltd**
- Lower Technology Readiness Level (TRL) opportunities via the Collaboratorium



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Contact us @

hello@ukcric.com
www.ukcric.com

Hear from us by

Signing up to the UKCRIC newsletter *www.ukcric.com*
Following us on Twitter *[@ukcric](https://twitter.com/ukcric)*