



UK Research
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UKRI trusted and connected Data and Analytics Research Environments

Phase 1 collaborative design and dialogue

Launch webinar – 28 July 2021

Today's agenda

- **Welcome**
Event chair, Caroline Cake, Health Data Research UK
- **Panel discussion: The UK's vision for digital research infrastructure**
Professor Patrick Chinnery, Medical Research Council
Jane Nicholson, Engineering and Physical Sciences Research Council
Professor Sir Ian Diamond, National Statistician
- **Enabling safe, trustworthy and novel research**
Emma Gordon, Administrative Data Research UK
- **Public benefit and involvement**
Angela Coulter, Health Data Research UK's Public Advisory Board
- **Introducing phase 1: Collaborative design and dialogue**
Hans-Erik Aronson, Health Data Research UK
Gerry Reilly, Health Data Research UK
- **Your questions and answers**





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HDRUK
Health Data Research UK



ADRU
Data-driven change

Introducing Phase 1: Collaborative design and dialogue

Hans-Erik Aronson & Gerry Reilly

What question is the programme aiming to answer?



“How should a national secure and interoperable digital research infrastructure, and associated services, be designed and implemented (2022-2026) to connect and analyse complex sensitive (often unconsented) data, from across disciplines and sectors in a flexible, efficient and sustainable way?”

Open Dialogue and Community Co-Design

- Key to success is delivering an infrastructure that demonstrates **trustworthiness** and has the full confidence, and meets the needs of, data controllers, users (scientists), and **the public** – now and in the future
- **Community co-design** will be inclusive and transparent, engaging a range of stakeholders from **across different disciplines** and sectors, to ensure that a shared capability is established and with a clear vision of what needs to be achieved
- **Formal engagement with UKRI leadership including the Digital Research Infrastructure Committee** , and with **industry**, and **international thought leadership** will be established
- **Stakeholders from relevant UKRI investments** (e.g. HDR UK, ADR UK, ATI, IRIS, ARCHER, JASMIN and others) will be requested to assist in convening this due to their **considerable track record, expertise and links to their respective communities**
- **Building on best practice, develop a “blueprint”** of data standards, access and ethics policies, and technical services
- **Gather detailed technical-social specification** for the standards and services. Focus on providing the context and facilities to **maintain** the **integrity** of a **trustworthy** data research ecosystem for distributed data linkage and analysis
- **Evaluate and promote the use of Privacy Enhancing Technologies**
- A programme of **Sprint Exemplar Projects** to test concepts across socio-technical requirements and use cases

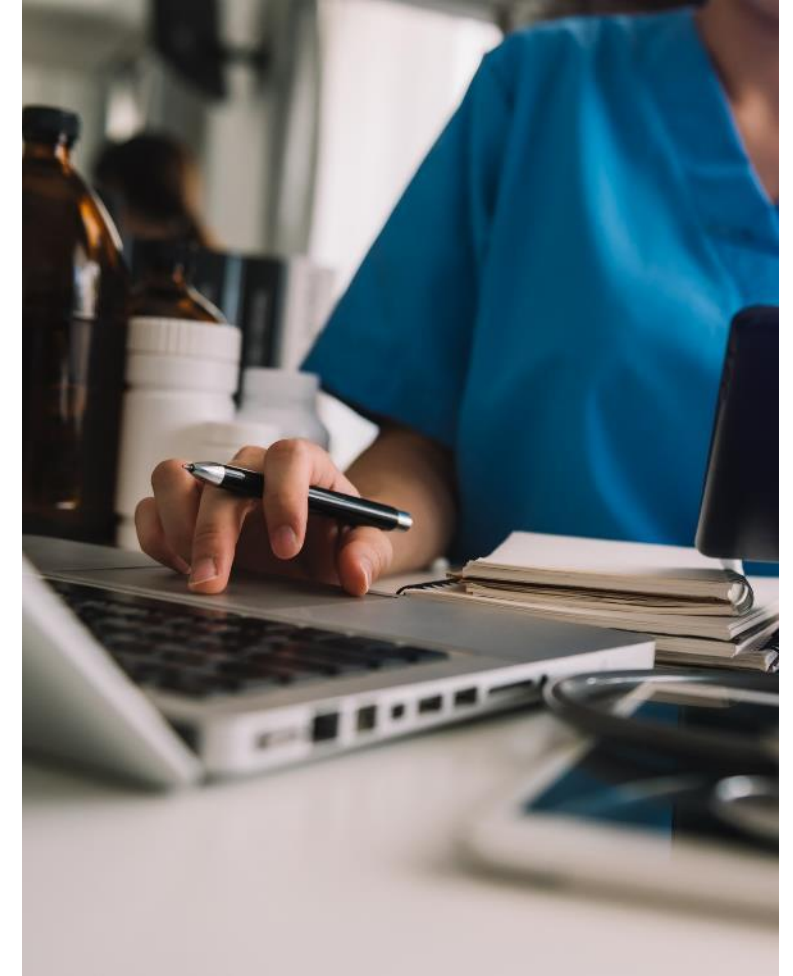
Assumptions

- We are **not starting from scratch**
- There is a **cross council need**: There are strategic use cases that span research councils and require a common architecture
- A federated infrastructure is **technically feasible**
- It is **ethically and legally feasible** and would be **trusted by the public**: There are good governance practices which can be adopted and scaled across councils.
- It is feasible to do within the **funding and time envelope** set by UKRI
- There is strong **buy-in** from the Research Councils, the government, the data custodians and the researchers for this approach



Key stakeholders for Phase 1

- Data users across research communities (academia, charities, industry, government, NHS)
- Research funders across research communities
- Current beneficiaries of research, for example patient groups
- Data privacy and advocacy groups
- General public representatives (future beneficiaries of research)
- Technology providers and enablers
- Current data custodians and future anticipated data custodians (e.g. streaming data such as that from wearables)
- Current TRE service providers
- Policymakers (e.g., associated with research, public health, innovation)
- International thought leaders in digital research infrastructure



Outputs

- A **design for a novel sustainable national federated digital infrastructure** (for example, services, TREs and privacy enhancing technologies) that has been **co-developed** with users, funders, public, technology providers and data custodians and that provides a range of capabilities that can be flexibly deployed to support different analytical requirements.
- **Specification for sprints / use cases** for specific aspects of the approach and options under consideration.
- A programme of **stakeholder engagement activities and events** that contribute to the design and build confidence and buy-in among stakeholders in the proposed approach.
- A **detailed delivery plan for phase 2** and an **outline plan for phase 3**.
- **Contributions to the UKRI Digital Research Infrastructure Committee business case for phases 2 and beyond.**



Phase 1: Key dates

- August to December 2021 – Listen and Learn
- December 2021 to March 2022 – Test and Evolve
- April to July 2022 – Agree and Plan

Sprint Exemplar Projects



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Aim of the Sprint Exemplar Projects

“Alongside the other elements of the Design and Dialogue Phase, the Sprint Exemplar Projects aim to establish whether it would be possible for the UKRI research councils to increase research impact by aligning around a common federated data infrastructure architecture with shared standards for governance, ethics, and public engagement.”



Potential project areas

Applications are invited that address one or more of the following areas:

Driver use cases that require data from across the research councils. Each project would be expected to demonstrate the utility of using data from across a minimum of two research councils and showing the opportunity for scaling across other councils in the future.

Technology demonstrators that improved data discovery, metadata, API development to support federated analytics and data visualisation. Projects could either demonstrate either technology scaling in one of the areas described or the re-use of technology from the existing investments from one research council into deployment with data from another council.

Establishing best practice for governance, ethics and public engagement. It is anticipated that projects will be funded in this area would demonstrate how best practice could be adopted by different councils and scaled across UKRI more widely.

Funding and eligibility

- Up to 10 projects will be funded, with funding of between £100K-£400K
- Projects will be fixed term, with final reports delivered for July 2022. Projects will not be extended – these are sprints
- All project teams will be expected to actively collaborate as a community and participate in the mid-project reviews
- All outputs will be shared openly under the IP guidelines that will be established for the overall programme
- Proposals must be led by a recognised research organisation. At least one of the Senior Investigators must have a strong track record of grant support and/or research and innovation outputs. Evidence of active industry participation in a consortium is welcome but not essential



Timeline

This timeline is still provisional and subject to revision

Date	Activity
Sprint Exemplar Programme Call Launch	14 September 2021
Applications Close	14 October 2021
Contracts Complete	25 November 2021
Projects Launch	2 December 2021
Mid Sprint Exemplar Day	21 March 2022
Final Sprint Exemplar Day	30 June 2022
Final Reports and Wrap Up	29 July 2022

Sign up for updates to get involved

Find out more by visiting UKRI's website for general information

<https://www.ukri.org/our-work/creating-world-class-research-and-innovation-infrastructure/data-and-analytics-research-environments/>

Sign up to receive updates via our online form

www.hdr.uk.ac.uk/ukri-trusted-and-connected-data-and-analytics-research-environments-programme-updates

Thank you!

