



UK Research  
and Innovation



# DARE UK

## SATRE – Standardised Architecture for Trusted Research Environments

*Dr Simon Li (on behalf of the consortium)*



University  
of Dundee

UCL ADVANCED RESEARCH  
COMPUTING CENTRE



UCL

## LANDSCAPE – What’s the problem?

### A large number of TRE implementations

Running on a wide range of infrastructure

- Public cloud (e.g. AWS, Azure, Google)
- On-prem (e.g. VMWare, OpenStack)

Ranging from open-source to commercially developed

Example production TREs: ONS, NHS England, Public Health Scotland, Scottish Safe Haven Network, SAIL Databank, Turing Data Safe Haven

### Governance

Four vs one nation regulatory frameworks

### TREs are the future of sensitive/health data in the UK

- [DARE/UKRI: “Paving the way for coordinated national infrastructure”](#)
- [HDR UK/NHSX: “Building TREs”](#)
- [Goldacre Review](#)
- [DHSC: “Data Saves Lives”](#)

# Multidisciplinary Team

## TREEHOUSE/AWS



Dr Christian Cole (PI, AWS TRE)



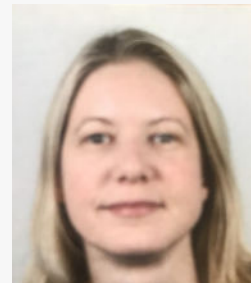
Dr Simon Li (HIC, AWS TRE)

## HDR UK

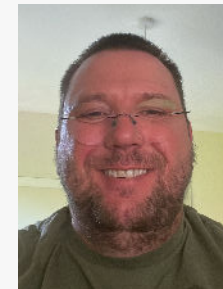


Prof. Emily Jefferson

## Public & Stakeholder Engagement



Layla Robinson (RDS)



Antony Chuter Lay Participant

## Turing/Azure



Prof. James Hetherington (UCL, Azure TRE)



Dr Martin O'Reilly (Turing TRE)



Prof. Sonya Coleman (SMDH)



Dr Dermott Kerr (SMDH)



Dr Justin Quinn (SMDH)



Jill Beggs Lay Participant



Hari Sood (Turing, SocRSE)

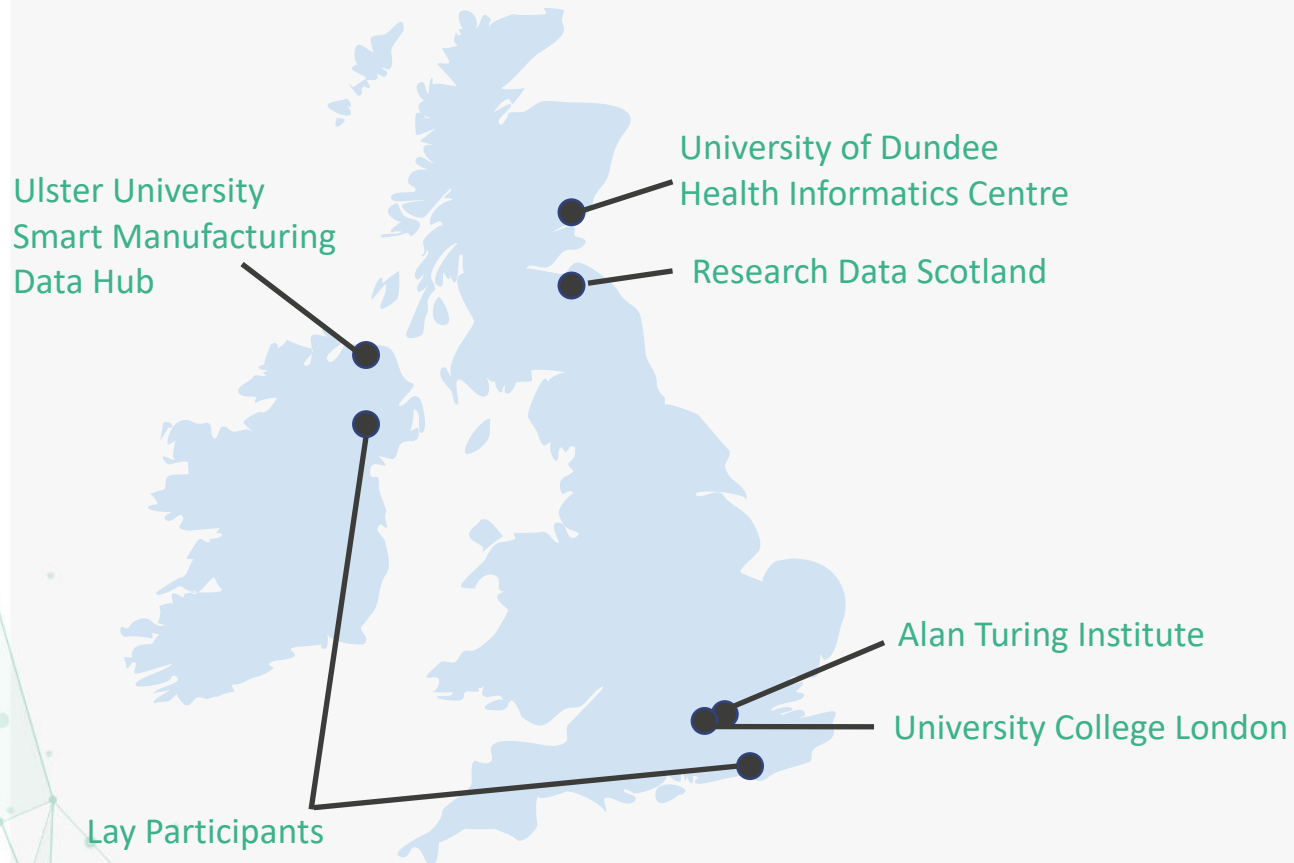


Dr James Robinson (Turing TRE)



Dr Cian O'Donovan (UCL, Azure TRE)

## Expertise & Background



### Over 10 years TRE Experience

- Local government, health, industry

### Worked on previous DARE projects

- TREEHOOSE & GRAIMATTER projects
- Ready to go
- Links with current DARE bids

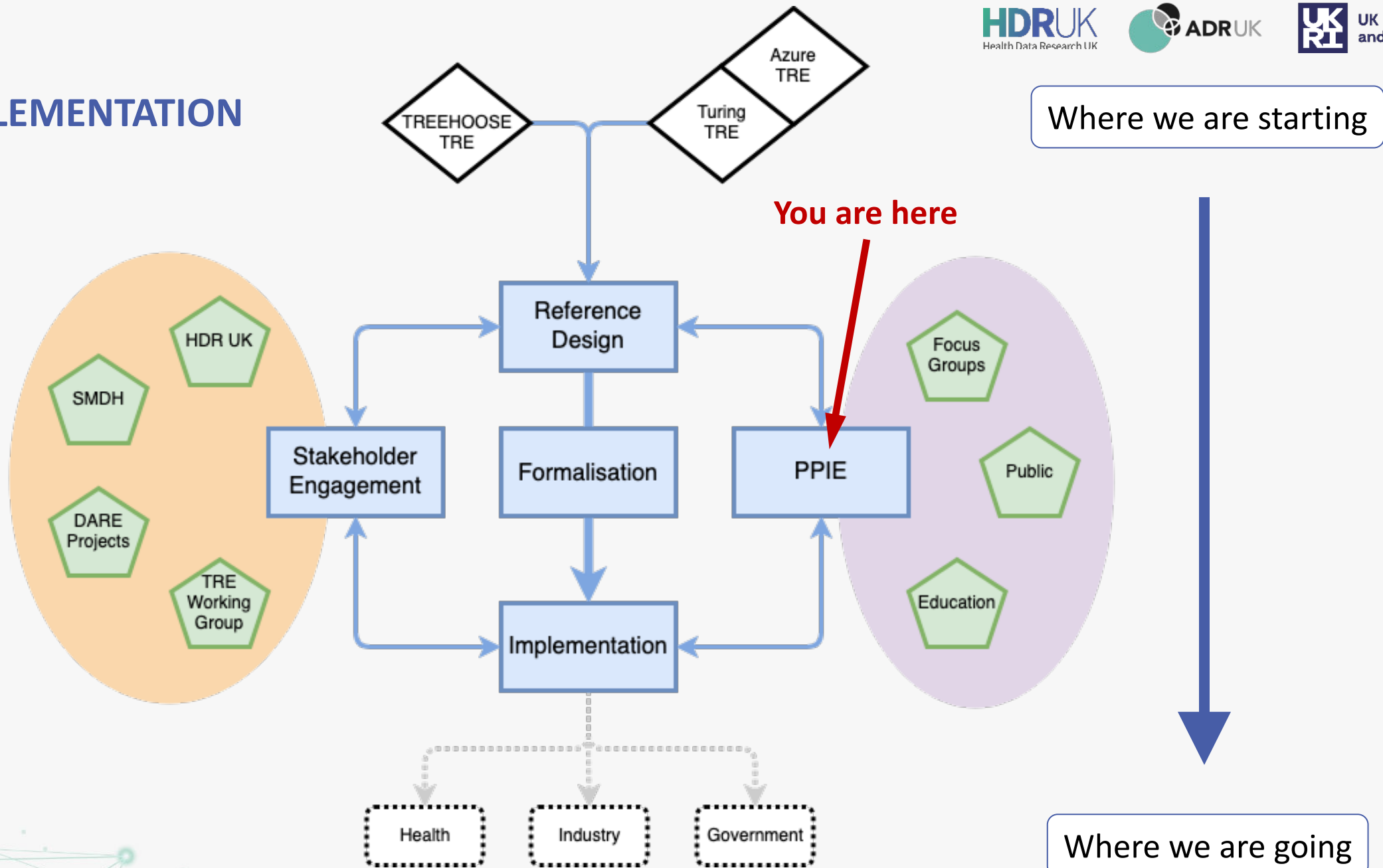
### Test Benches

- UCL/ARC: existing TRE expertise
- Ulster University/SMDH: long-running industrial manufacturing partnerships, £50m SMDH consortium

## AIMS

1. Combine the **expertise of running multiple production TREs** with existing **public, community and stakeholder relationships** across the UK to inform the **needs and implementations** of the reference TRE architecture.
2. Formalise the specification and **validate against deployments of open-source TREs** by HIC, Turing Institute, UCL and SMDH.
3. Establish a framework for long-term vendor-neutral **governance and management of the reference specification** beyond SATRE.

# IMPLEMENTATION



## Outputs & IMPACT



**TRE Explainer  
Material**

Mar-Aug 2023



**TRE Specification  
Documentation &  
Journal Publication(s)**

Jun 2023



**Open-Source  
Reference TRE  
Implementations**

Aug-Sep 2023



**Community  
Governance  
Guidance**

Aug-Oct 2023

## Current Activities

### Engagement with the wider secure data community

- Survey UK-wide public organisations
- Joint meetings to develop the design to include all views: 2 events in March

### Two public participation workshops now with more later

- Week beginning 26<sup>th</sup> March

### Developing informational media to launch in the next couple of months

### Full transparency:

- <https://medium.com/@SATRE>
- <https://github.com/sa-tre>







UK Research  
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**HDRUK**  
Health Data Research UK



**ADRUK**  
*Data-driven change*

# DARE UK

## Thank you for listening

Contact us: [satre-contact@dundee.ac.uk](mailto:satre-contact@dundee.ac.uk)



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