DARE UK

SATRE: Standardised Architecture for Trusted Research Environments

Dr Martin O'Reilly on behalf of the team

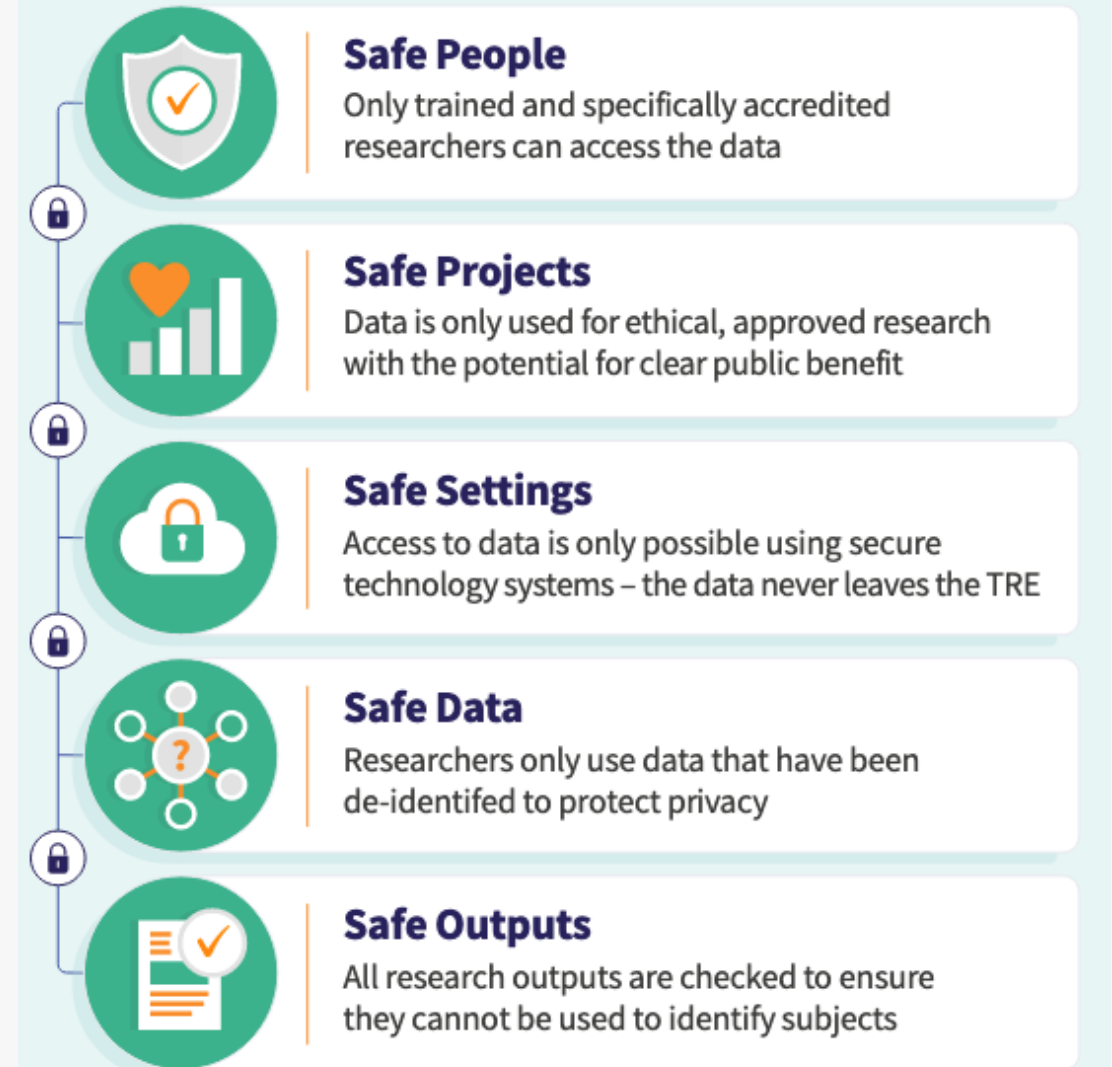# What Are Trusted Research Environments (TREs)?

- In different areas may be called: Data Safe Havens, Secure Data Environments or similar

- A computing service provided by a trusted organisation encapsulating the Five Safes

Safe People
Only trained and specifically accredited researchers can access the data

Safe Projects
Data is only used for ethical, approved research with the potential for clear public benefit

Safe Settings
Access to data is only possible using secure technology systems – the data never leaves the TRE

Safe Data
Researchers only use data that have been de-identifed to protect privacy

Safe Outputs
All research outputs are checked to ensure they cannot be used to identify subjects

LANDSCAPE – What's the current context?

TREs are the future for sensitive/health data research in the UK
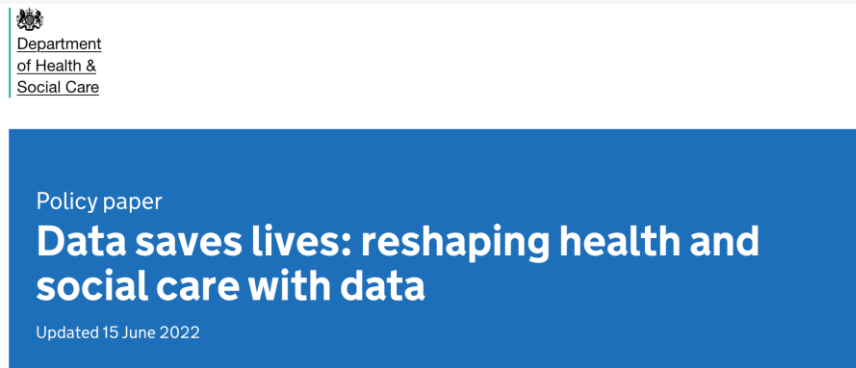
LANDSCAPE – What's the current context?

There are currently a large number of TRE implementations in the UK, with many different approaches

Infrastructure choices
Cloud
On-prem

Development models
Community-driven
Commercial

Governance & Accreditation
Regulatory requirements
ISO27001, CE+, DSPT...
Risk appetites

Example production TREs: ONS, NHS England, Public Health Scotland, Scottish Safe Haven Network, SAIL Databank, Turing Data Safe Haven, Azure TRE... and many more...

DESIGN WORK - SATRE

Using a **community-driven approach** to build a **reference TRE architecture** and **accompanying implementation**

Learn & Explore   **Simplify & Specify**   **Guide & Sustain**

Transparency and Openness – Core Principle

Open Code/Resources:

- https://github.com/sa-tre

- https://github.com/sa-tre/satre-specification

Open Documentation:

- https://satre-specification.readthedocs.io

Open Communication:

- https://medium.com/satre

- satre-contact@dundee.ac.uk

The Specification - A guide on how to build and run a TRE

Four Architectural Principles

- Usability

- Maintaining Public Trust

- Observability

- Standardisation

- 29 Capabilities

  - 160 statements

  - 75 mandatory

Four Pillars

- Information Governance

- Computing Technology

- Data Management

- Supporting Capabilities

- Creates a uniform landscape for TREs to exist in

  - Evaluation of capabilities

https://satre-specification.readthedocs.io

Public Inclusion & Impact on Specification

- Embedded public voices within the project with lay representatives

- Six workshops held with members of the public

    - Two at start of project

    - Four to report on project progress

- Inclusion of public engagement statements on transparency and involving the right people in the right way

- Support for inclusion of a statement on near misses and incidents and the actions required by TREs

- Upgrading of the public engagement statements

    - Optional -> Mandatory* (required for personal data)

- Continuous focus on communicating SATRE's work in an accessible way
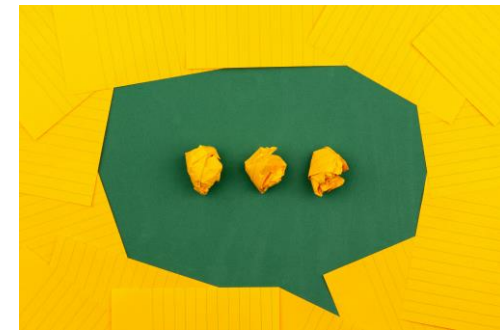
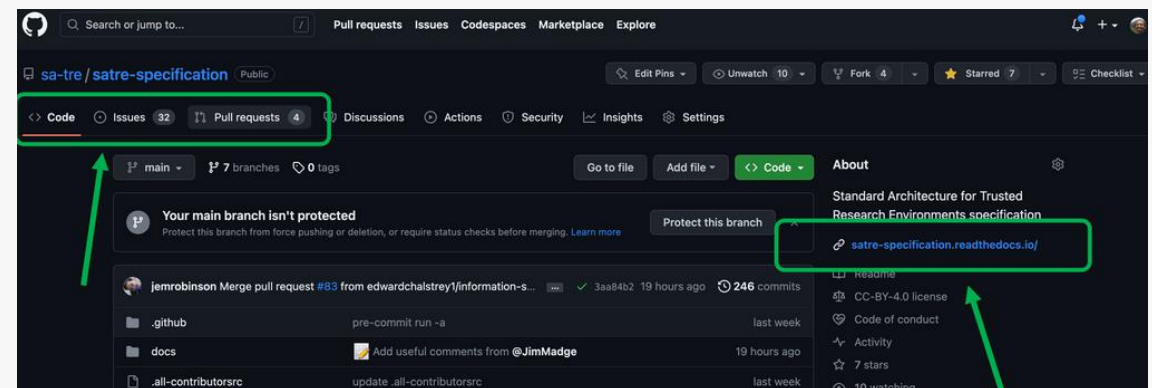# Stakeholder Activity: a truly community led specification

- A project based on conversation, compromise and review with the whole community

- Content, direction and delivery shaped by the community. For example:
  - Inclusion of IG as a pillar
  - SATRE principles
  - Why SATRE

- Two kick-off sessions in March

- Feature Survey

- 14 Collaboration Cafés

- 25 contributors making direct changes to the content

✨ **Contributing to the SATRE Specification**

We're excited that you want to contribute 🚀

Some ways to immediately get involved are:

- **Join a Collaboration Cafe**: These are online events where we discuss the specification and other TRE topics. They are a great way to meet other members of the community, find out more about the project, and are open to everyone.
- **Sign-up for email updates** from the SATRE project
- **Read the current SATRE specification**
- **Provide feedback and suggestions** on the specification:
  - If you are a GitHub user please open or comment on an issue
  - Alternatively, you can fill in this form (no login needed)

Find Out More

YouTube @HealthInformaticsCentre

Medium Blog: medium.com/satre

DARE UK

Thank you for listening

https://satre-specification.readthedocs.io

satre-contact@dundee.ac.uk

medium.com/satre