

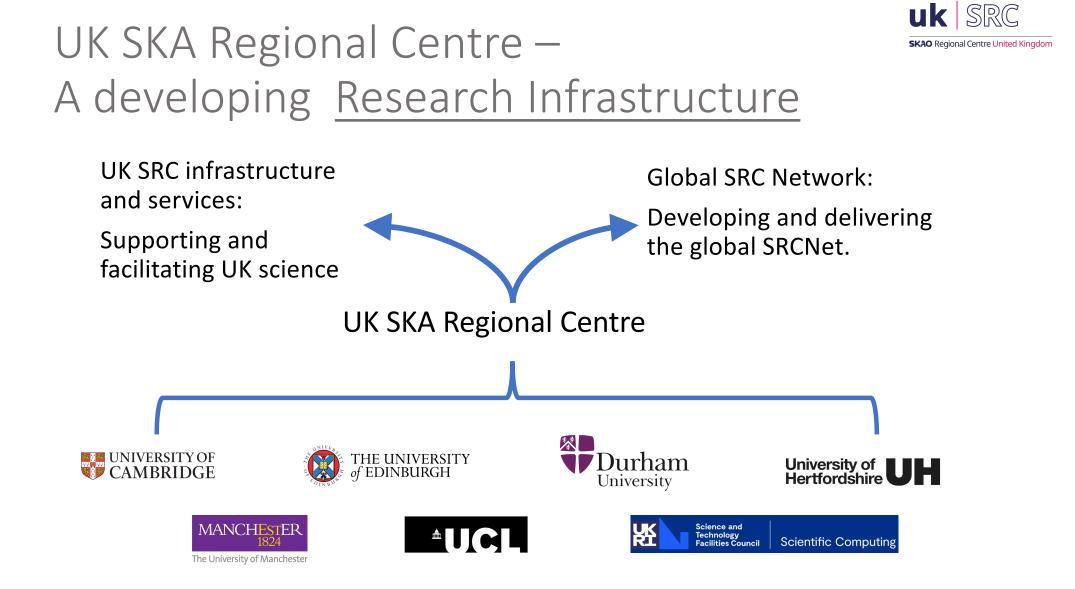


SKAO Regional Centre United Kingdom

# UKSRC SRCNet v0.1

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### **UKSRC** Response context

#### • Consortium of 7 institutions

- Project funded by Science and Technology Facilities Council a part of UK Research & Innovation
- Initial 2 year project ~25FTE in total 1<sup>st</sup> phase runs to end of 2025

#### • Part of STFC IRIS infrastructure

- Shared infrastructure for STFC science (HEP, Astronomy, facilities)
- Manages capital allocations
- Provides users for any unused capacity

#### Network Connections

- STFC-RAL 200Gbs to JANET and GEANT, and IPv6 capabilities.
  - Internal resilient and scalable 400Gps networking
- Similar connectivity between other UK Sites: Cam, Man, Dur etc (10-100gbps) via JANET
- Resource allocations in place for SRCNet v0.1 and 0.2)
- Expertise
  - STFC-RAL draws on experience and expertise in deploying and operating globally federated data storage facilities at many 10s of PB scale as WLCG Tier 1



### **UKSRC** Response highlights

- **Storage**: Included 4PB in our current (FY24/25) procurement/deployment plans.
  - Based on 2023 top-level roadmap requirements Up to 20PB by end of 2025
  - Deployments at STFC-RAL
    - New ceph storage platform sharing configuration and service management with existing ECHO and Deneb data stores at RAL
- Compute: 0.175 PFLOPS Primarily STFC-RAL
  - Deploying into STFC OpenStack cloud (~50000 physical cores)
  - Access to existing resources initially to enable quicker deployment
  - Supplement at other UK sites possible
- Support Resources:
  - > 1FTE at RAL from dedicated UKSRC staff supported by existing STFC cloud and storage operations teams
  - Across the UKSRC project we have effort (~25-30FTE) for all aspects of the project some of which can support other aspect of SRCNet 0.1 deployment
- Network testing: Demonstrated data transfer requirements with South Africa and Australia



## UKSRC Response highlights (cont)

### Software :

- Able to deploy software & services as required
- Will continue providing global services
  - SKA-IAM
  - File Transfer Service
  - Supporting deployment of perfsonar for automated network monitoring across SRCNet v0.1 nodes
- Orchestrator to deploy, manage and scale services e.g. Kubernetes
- Monitoring services again leveraging existing tools where appropriate





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#### https://www.uksrc.org

Joint mailing list: STFC UK SKA Observatory Science Committee <u>UKSKA-SCIENCECOMMUNITY@JISCMAIL.AC.UK</u>

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Register for Science Data Challenge 3b – Inferences *Coming soon ...*