Access Mechanisms for ARCHER2

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www.archer2.ac.uk

archer2

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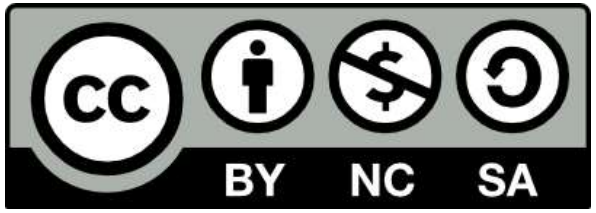
Reusing this material



Partners


UKRI
Engineering and Physical Sciences Research Council
Natural Environment Research Council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Variety of Access Mechanisms

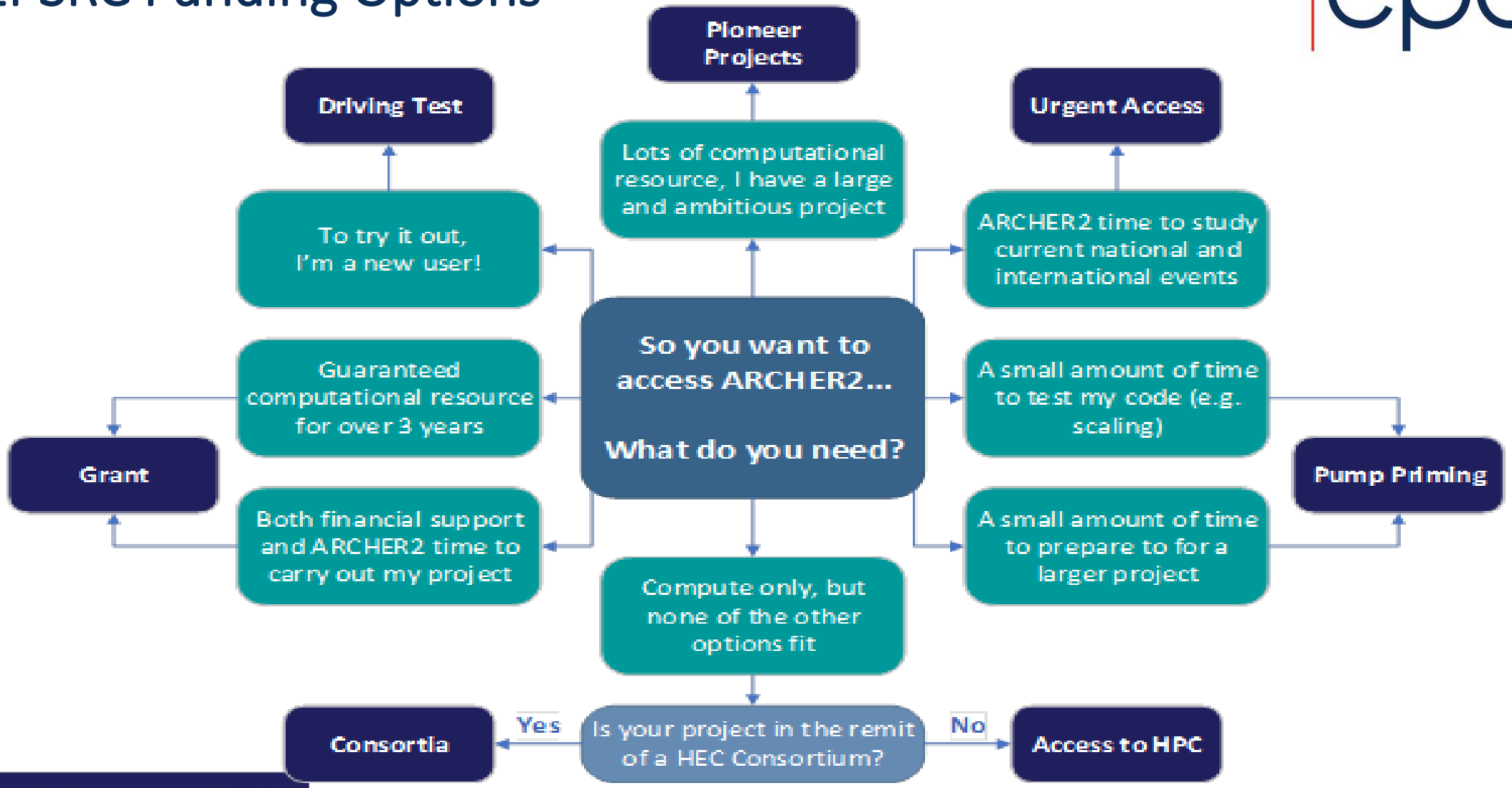
- Amount of computation required
- Duration required
- Science Remit
- Funding Body

ARCHER2 CSE Team assess technical suitability
RCUK assess the Science case

Further details:
https://www.archer2.ac.uk/support-access/access.html

- Access through the Driving Test
- Access through Pump-Priming
- ARCHER2 Specific Calls
- Access through EPSRC/NERC Scientific Consortia
- Access through EPSRC Grants
- Access through NERC Grants
- Access through UKRI Grants
- Access through Grants with other Funding Bodies
- Top-Up for exisiting EPSRC Grants
- Access for NERC Remit
- Access through PRACE

EPSRC Funding Options



ARCHER2 Driving Test

- Intended to to promote access to HPC to new users and communities
- Simple, easily accessible way to get access
- Intended for academic and non-academic researchers working in UK based research institutions
- Successfully complete the Driving Test small allocation for up to 12 months
- Only one Driving Test account application per person

Further details can be found at: https://www.archer2.ac.uk/training/driving-test.html

Pump-Priming Access

- Successor to ARCHER Instant Access
- EPSRC researchers only
- Small allocation for 6 months
- Used for trailing ARCHER2
  - Porting code, feasibility study
  - Benchmarking to prepare for larger applications
  - Expectation is that you are preparing to apply for time through a peer reviewed process
  - One-off allocation, follow-up applications won't be approved
  - Cannot be used as a repeated way to gain time
- EPSRC will confirm remit following approved Technical Assessment

Large Scale Access: EPSRC

Type	Duration	Resource Allowed	Notes
Grant	Duration of Grant	Unlimited	Provides funding in addition to computational resource
Access to HPC Call *Successor to ARCHER RAP*	Up to 1 year	Minimum of 4000 CU	Calls expected to open every six months
Pioneer Projects *Successor to ARCHER Leadership Projects*	Up to 2 years	Call total Minimum of 165,000 CU per year.	Ambitious, computationally intensive simulations

- All EPSRC applications require applicant to complete a Technical Assessment (TA) form
- TA is submitted to the Service Desk ahead of submitting the application

EPSRC Consortia

- Users can join Scientific Consortia, formed around research communities with substantial and continuous computational needs
- Each consortium has its own way of applying for access and allocating time

Name	Consortium Leader	ARCHER2 Project Code
UK Turbulence Consortium (UKTC)	Prof. Sylvain Lazait (Imperial College)	e01
Materials Chemistry Consortium (MCC)	Prof. Scott Woodley (UCL)	e05
UK Car-Parrinello Consortium (UKCP)	Prof. Matt Probert (University of York)	e89
HEC Biomolecular Simulation Consortium (HECBioSim)	Prof. Syma Khalid (University of Southampton)	e280
Plasma HEC Consortium	Prof. Tony Arber (University of Warwick)	e281
UK Consortium on Mesoscale Engineering Science (UKCOMES)	Prof. Kai Luo (UCL)	e283
UK Consortium on Turbulent Reacting Flows (UKCTRF)	Prof. Nilanjan Chakrobarty (University of Newcastle)	e305
UK Atomic, Molecular and Optical physics R-matrix consortium (UK AMOR)	Prof. Jonathon Tennyson (UCL)	e585

Further details: https://www.archer2.ac.uk/research/consortia/

NERC Consortia

- Majority of ARCHER2 NERC resource is managed through three NERC consortia
- No Technical Assessment required for NERC applications

Name	Consortium Leader	ARCHER2 Project Code
National Oceanography Centre (NOC)	Dr Andrew Coward (University of Southampton)	n01
National Centre for Atmospheric Science (NCAS)	Dr Grenville Lister (University of Reading)	n02
Mineral Physics Consortium	Prof. John Brodholt (UCL)	n03

Further details: https://nerc.ukri.org/research/sites/facilities/hpc/

Grants

- Access through EPSRC Grants
  - ARCHER2 allocation can be awarded for the duration of the Grant
  - Technical Assessment must be completed
- Access through NERC Grants
  - Contact the relevant NERC consortia leader for advice
  - Further details: https://nerc.ukri.org/research/sites/facilities/hpc/
- Access through UKRI Grants and with other Funding Bodies
  - Technical Assessment must be completed
  - Service Desk will then contact EPSRC for approval
- Top-Up for exisiting EPSRC Grants
  - Technical Assessment must be completed
  - Apply for resource via Access to HPC Call
- Access through PRACE Award
  - Further details available: https://prace-ri.eu/

Technical Assessment Process

- Complete form from ARCHER2 website
- Submit to Service Desk
- CSE team will assess technical suitability for ARCHER2
  - Will provide assistance if required
- CSE team complete, sign form and return to applicant
- Applicant includes signed form with their application to EPSRC

Technical Assessment Form Covers:

- ARCHER2 is part of the UK ecosystem which includes the Tier2 Systems
  - Demonstrate the requirement for ARCHER2
- Suitability of code for ARCHER2: Parallel models used, dependencies, etc.
- Scaling of code/problem: Scaling proof required as part of application
  - Must be specific to type of problem addressed in application – general scaling data is not enough
- Technical expertise of team: Is there technical expertise or access to expertise within the project team
- Data management: Organisation, storage and transfer of data

Any Questions….

support@archer2.ac.uk

thanks to Rebecca (EPSRC), Frances (NERC) and Lorna (CSE) for being available to answer any questions

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