E-Infrastructure – A Quick Review
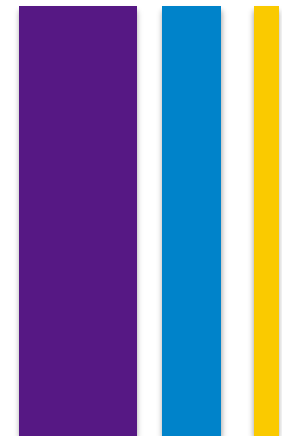
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E-Infrastructure - Achievements

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- We will:
  - invest in **e-infrastructure** (e.g. next generation high performance computing) which supports techniques such as modelling and simulation that are as important as physical experimentation, benefiting areas such as aerospace, climate modelling and security.

- £20m Tier-2 - 6 centres on-stream, in budget on-time, open for access July-Sept, based on strategy to provide increased capacity, architectural diversity, national integrated layer, widen user base, encouraging innovative and multidisciplinary science.

- ARCHER-2 project initiated, on track establishing base line evaluation of Business Case options leading to community engagement and full specification through 2017.

- International fund for 'Best Use of ARCHER' to support PhD and post-doc travel to USA.

- Benefits Realisation of HPC - Science outputs of HPC, ARCHER usage, developing ARCHER outreach activities, Women in HPC, Wee ARCHIE...

EPSRC - The next year or two…

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- The e-Infrastructure group has set objectives for the coming year.
- We will continue to make the case for the continuation of an HPC service for the UK academic communities.
- We face challenges – financial, political and organisational:

  - The transition to UKRI;
  - The evolving role of EPSRC and NERC in supporting HPC;
  - Capital budget constraints and rebalancing;
  - Project resourcing;
  - Technology roadmaps for HPC.

Software Strategy 2017

Our aim is for Software as an Infrastructure to continue to receive support and for EPSRC to deliver a robust, long-term programme and vision.

This vision will aim to support the research, development, management and maintenance of high-quality, robust, recognised, accredited and valued software for the scientific communities.

We want to reassure researchers that time spent on software engineering is valued, and encourage young researchers to learn and apply good software engineering.

"The EPSRC wishes to reinforce its long term commitment to software as an infrastructure by ensuring that the importance of utilising and developing good software to conduct scientific research is recognised and valued by the scientific community and key stakeholders by 2020."

ARCHER 2 – Background and Progress

- The ARCHER2 project is being run in 3 phases:
  - Pre-project;
  - Procurement;
  - Delivery and Operation.

- We are currently in pre-project:
  - Prepared Outline Business Case;
  - PRINCE2 structures and documentation in place;
  - Governance structures and membership in place;
  - Generation and subsequent evaluation of Long List;
  - Pre-market analysis and engagement;
  - Gateway 1 & 2 in preparation;
  - Government clearances process initiated;
  - User engagement underway;
  - Drafting of Statement of Requirements;
  - Definition of Technical Specification and benchmarking parameters.

User Survey - Initial Findings

▐▌ The user survey was delayed by the General Election – hence very short period of engagement.

▐▌ There will be a workshop in London on 12th July, but places are limited – watch for updates from EPSRC and ARCHER.

▐▌ Around two-thirds of survey responses were unusable and will not form the final analysis.

▐▌ First impressions:

   ▐▌ A lot of comments on queue times, kAU allocations, wall-clock allocations…
   ▐▌ More appetite for different processors and types;
   ▐▌ Stressing the importance of good software support and code quality.

Thanks!