

REVIEW OF GOVERNANCE ARRANGEMENTS FOR AUSTRALIA'S PEAK HIGH PERFORMANCE COMPUTING TERMS OF REFERENCE

Background

Demand for national peak high performance computing (HPC) infrastructure underpins highly simulation intensive and data intensive research fields and is vital in maintaining a globally competitive research system.

HPC capability has consistently been identified as a critical national requirement in all the national roadmaps since 2006. The 2016 National Research Infrastructure Roadmap process (2016 Roadmap) has identified significant improvements that could be delivered from a national governance model for our peak HPC, thereby ensuring maximum benefit to the Australian research effort.

The 2016 Roadmap is being developed by an Expert Working Group led by Australia's Chief Scientist. The Expert Working Group has recommended that a review of existing governance arrangements be undertaken to explore arrangements that will optimise the cooperative operations of the nation's existing peak HPC facilities. The review will be undertaken in advance of the implementation of the 2016 Roadmap in the expectation that the outcome will deliver significantly improved strategic direction for national HPC.

The review is being commissioned by the Department of Education and Training on the recommendation of the 2016 Roadmap Expert Working Group and will commence in December 2016 and be completed in the first quarter of 2017.

The Review will

- Examine and make recommendations on options to strengthen and streamline governance arrangements for the existing national peak HPC facilities and capabilities.
- Consult with key stakeholders such as the lead agents for existing facilities, namely the Australian National University (ANU) for the National Computational Infrastructure and the CSIRO for Pawsey Supercomputing Centre, university sector, key researchers in relevant ARC Centres of Excellence, Bureau of Meteorology, Geoscience Australia, the Australian Research Council, relevant state and Commonwealth government departments.
- Examine international best practice for national peak HPC facilities.
- Develop a pathway that will optimise the cooperative operations of the existing peak HPC facilities in consultation with the existing lead agents, boards and management teams of the NCI and the Pawsey.

In framing its recommendations the review will give consideration to:

- The governance arrangements that could support an investment framework that will respond to new and emerging priority areas and advances in technology to meet short, medium and long term needs of the research community and key users of the facilities.
- The ability of the governance arrangements to optimise the national investments and co-investment from partners, industry, state and territory governments, institutions and other service providers.
- The benefits to be derived from establishing an optimal national capability replacement cycle based on secured future investment by participating partners and other co-investors.

The review will be undertaken by Grahame Cook PSM supported by the 2016 National Research Infrastructure Roadmap Taskforce, Department of Education and Training.

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