

AUSTRALIAN E-RESEARCH INFRASTRUCTURE COUNCIL (AeRIC)

AeRIC MEETING – 31 AUGUST 2007

AGENDA ITEM 4: EXECUTIVE DIRECTOR'S REPORT

Purpose

To provide the Council with an overview of activities to progress the following components of the Platforms for Collaboration capability:

- Interoperation and Collaboration Infrastructure; and
- National Computational Infrastructure.

Issues

Dr Francis will provide a verbal update on recent activities within these components of the PFC capability. An overview of wider administrative arrangements is also provided to allow AeRIC to consider what further discussion it would like to undertake. The Attachment provides further background.

Interoperation and Collaboration Infrastructure (ICI)

The funding agreement between DEST and VPAC provides a framework to agree activities in the ICI component until 30 June 2011. Within the framework, a number of documents need to be submitted to, and agreed by DEST following appropriate consultation with AeRIC, namely:

- an Establishment Plan for the period from 1 July 2007 to 30 September 2007 (already in place);
- an Implementation plan to cover the period from the end of the Establishment Plan to 30 June 2008. This is to be submitted to DEST by 30 September 2007;
- a Joint Venture Agreement between the ICI partners is to be submitted to DEST for consideration by 30 October 2007;
- individual Annual Business Plans (ABPs), for 2008-09, 2009-10 and 2010-11. These will be due 3 months prior to the period covered by the ABP; and
- Progress Reports will be due 3 months after a period covered by an ABP.

National Computational Infrastructure (NCI)

Reporting and approval arrangements for NCI in the funding agreement between DEST and the ANU mirror are similar to ICI in that:

- an agreed Initial Operation Plan covers the period from 1 July to 30 September 2007;
- an Interim Implementation Plan for the period 1 October 2007 to 30 June 2008 is due by 30 September 2007;
- ABP and Progress report requirements are the same.

Action

That AeRIC:

1. note activities in the ICI and NCI components of PFC; and
2. advise whether it would like detailed presentations on the ICI and NCI components, and, if so, when.

AeRIC Secretariat
August 2007

INTEROPERATION AND COLLABORATION INFRASTRUCTURE

Overview

The Interoperation and Collaboration Infrastructure (ICI) comprises a national communications network and user applications to provide access to nationally distributed research infrastructure and services.

On 22 June 2007 DEST signed an ICI NCRIS Funding Agreement with the Victorian Partnership for Advanced Computing (VPAC). As determined in the PfC Investment Plan, the ICI Agreement is for \$20 million. Under the Agreement, VPAC is required to distribute funds to a network of service providers across Australia who will contribute computer and data support systems over the distributed grid system.

The ICI project is based around the provision of infrastructure, however the Agreement is focused on funding people across a number of participating institutions to provide advanced services and applications.

Background

The ICI is an enhancement of core activities and services funded by the Australian Government from the Systemic Infrastructure Initiative (SII) through the Australian Partnership for Advanced Computing (APAC). Direct investment in the ICI is through the previous APAC partner consortia, with VPAC as the lead organisation.

Implementation

While the initial NCRIS investment is to maintain services across the APAC partners, the long-term purpose of the ICI investment is to grow both the range of services and the number of connected sites nationally where these services can be provided. A staged implementation process has been developed, in recognition of the need to transition staff and structures from the previous APAC model and expand the existing services. The following activities have been identified for completion in 2007:

- VPAC and the ICI project participants delivered an Establishment Plan upon signing the agreement in June 2007. The Establishment Plan details the first three months of operation of the project and also triggered the first payment under the agreement.
- An ICI Implementation Plan is due to be submitted to DEST by 30 September 2007, which in effect will be the business plan for the period through to 30 June 2008.
- VPAC is also required to provide an acceptable Joint Venture Agreement between the partners. The Joint Venture is expected to consist of service providers across Australia and will detail working arrangements that support the provision of the ICI activities. This is expected to be submitted shortly after the Implementation Plan.

From 2008, a cycle of annual business plans and progress reports will commence.

Interaction with AeRIC

Under the ICI agreement, milestone payments will not be made until DEST, following consultation with AeRIC, is satisfied that the Implementation Plan and the annual Progress Reports have been

completed satisfactorily, showing alignment with the Platforms for Collaboration Investment Plan and NCRIS requirements.

All funds expended for the Project will be allocated by decisions of the ICI Executive Committee, in consultation with AeRIC. As the initial funding recipient, VPAC will be responsible for reporting to AeRIC on progress made.

Interaction with NEAT

As defined in the PfC Investment Plan, the \$20 million for ICI is to be split between ICI “operational” (\$14 million) and “developmental” (\$6 million) activities. The \$6 million developmental component forms one portion of the (NEAT) budget, the other component being contributed from the ANDS budget. The Developmental component of the ICI will involve projects negotiated with NEAT, and approved by AeRIC, to target identified tools and support services that require future development. As NEAT is expected to operate between the ICI and the ANDS programs, the budget has been allocated between both components.

NATIONAL COMPUTATIONAL INFRASTRUCTURE PROJECT

Overview

The National Computational Infrastructure (NCI) project (the Project), while built on the work of the Australian Partnership for Advanced Computing (APAC), will have broader scope and activities to service the wider research community. The Project is expected to deliver an internationally significant high-performance computing capability which can be assigned on a merit and priority basis, and build essential expertise in high-performance computing needed to support priority research. It will also provide a national strategy for computation infrastructure.

The Project has two main activities:

- Activity 1: Planning, Access, Policy and Outreach; and
- Activity 2: Operational Facilities and Services.

The Operational Facilities consist of the *National Facility* (NF) with a peak computing system for "capability" computing, and the *Specialised Facilities* providing high-end computing system that complement the NF in its support for user communities and their applications. The Services will be provided through the *Computational Tools and Techniques* activities that assist users to develop advanced computing tools and applications on these facilities.

Implementation

On 22 June 2007, DEST signed an NCI NCRIS Funding Agreement for \$26 million over 2007-2011 with the Australian National University (ANU). Under this Agreement, the Project will be governed by the ANU, on advice from the NCI Steering Committee (NCI/SC) which will be established. The Project will be managed by an NCI Director with the support of a project management office. The ANU will appoint a Project Delegate to whom the NCI Director will report, and through whom the Chair of the NCI/SC will transmit reports to the ANU.

The NCI Agreement focuses on service provision rather than creation and availability of assets. However, the work of the NCI is highly dependent on systems and upgrades to those systems in order to maintain and enhance service provision. To that extent, provision has been made in the funding to allow for this need.

Under the Agreement, the ANU will work with a number of sub-contractors, some of whom will be Project Partners, in bringing about the required outcomes. Project partners are organisations operating or providing significant resources (funding, infrastructure or other in-kind resources) or services; who have an interest in the capabilities and services provided by the Project; and may participate in the activities of the Project.

A Merit Allocation Committee (MAC) will be established to independently evaluate applications for resource grants on the systems funded by the Project. The ANU will appoint the membership of the MAC, on advice from the NCI/SC.

A staged implementation process has been developed, in recognition of the need to transition staff and structures from the previous APAC model and expand the existing services. The following activities were identified for completion in 2007:

- The provision of an acceptable Initial Operational Plan following the signing of the funding agreement. DEST has accepted the Initial Operational Plan delivered by ANU upon signing the agreement in June 2007. The Initial Operational Plan sets out the arrangements for the project including details on governance, access and pricing, ownership and management, and budget aspects, and triggered the first payment under the agreement.
- The provision of an acceptable NCI Implementation Plan to be submitted to DEST by 30 September 2007, which in effect is the business plan of the NCI for the period 1 October 2007 to 30 June 2008. DEST will review this and subsequent business plans annually and if acceptable, the appropriate level of funds would be advanced as specified in the funding agreement.

From 2008-09, a cycle of annual business plans and progress reports will commence.

Interaction with AeRIC

DEST will rely on the advice of AeRIC in accepting the nomination for the Chair of the NCI/SC, the NCI Director, the Chair of the MAC and Project Partners for the NCI. While these personnel have yet to be appointed, Professor Robin Stanton (ANU's contact for the Project) has a seat on AeRIC. Under the NCI Agreement, milestone payments will not be made until DEST, following consultation with AeRIC, is satisfied with the Implementation Plan and the annual Progress Reports. The proposed specialised facilities under the NCI, and the preferred approach to establishing these, are anticipated as a specific point of discussion within AeRIC at an appropriate time. This is anticipated to occur in conjunction with discussion of ANU's Interim Implementation Plan which is due to be submitted on 30 September 2007.