

Research Infrastructure Key Principles and Funding Guidelines

1. Introduction

The Science and Industry Endowment Fund was founded by statute in 1926 at the same time as the predecessor organisation to <u>CSIRO</u> – the CSIR. While the Fund has been quietly active since this time, CSIRO's recent gift to the Fund, made possible from licensing its wireless LAN intellectual property, has allowed it to be rejuvenated as an endowment mechanism for science in Australia.

The rejuvenated Fund was launched by the then Minister for Innovation, Industry, Science and Research, Senator the Hon Kim Carr on 20 October 2009.

The Science and Industry Endowment Act, 1926 provides that the Trustee of the Fund is CSIRO's Chief Executive, Dr Megan Clark. The Trustee is supported by an Advisory Council chaired by Professor Alan Robson, former Vice Chancellor of the University of Western Australia. The Council advises on research priorities.

The Fund will make strategic investments in scientific research that addresses issues of national priority for Australia.

The Fund will invest in science that contributes to Australia's sustainable future such as:

- fundamental research into new paradigms for sustainable resource use, environmental protection and community health.
- tactical research to fast-track solutions to national challenges
- collaborative research that brings together organisations capable of working together on solutions to national challenges
- scholarships that create and sustain young researchers capable of addressing national challenges

The Deed of Gift between CSIRO and the SIEF identifies five Special Purpose Areas which may attract future investment by the Fund, including the following area specific to infrastructure:

Landmark Research Infrastructure comprises the creation or development of nationally significant facilities for the conduct of research. This includes investment into national scale scientific equipment and special purpose facilities for the conduct of scientific research.

Further information on the other Special Purpose Areas can be found at www.sief.org.au

2. Purpose of this Document

The Research Infrastructure Funding Guidelines detail the requirements for participation in the SIEF Research Infrastructure ("SIEF RI") Program. They provide context for SIEF more generally including high level principles that will guide research infrastructure investments by SIEF, assessment criteria and application process.

3. Principles of Research Infrastructure Funding

The Trustee has determined that the following high level principles must be met to attract SIEF RI funding:

• Funding must support the development of major national research precincts in Australia that are global in scale and relevance.

- Investments must be transformative in terms of quality and scale for the research capabilities supported and should build critical mass on a global scale in the areas of priority.
- RI funding will only support highly leveraged collaborative proposals between key research partners across the NIS and is aimed to be a catalyst for major funding in areas of priority.
- SIEF will work proactively with key partners in each area to develop RI investment opportunities and do not intend to manage open rounds of submissions for this Program.

4. Use of Funding

SIEF funding in the range of \$5-15M will be made available for highly leveraged collaborative activities to the value of approximately \$30-60 million that create research infrastructure in line with the description of the SIEF Special Purpose Area and principles defined above. The purposes for which funding can be used include but are not limited to:

- 4.1. Supporting the construction of a new building or purchasing, refurbishing and/or extending existing infrastructure. This might include:
 - o building activities required to design and construct/refurbish the activity;
 - direct building costs associated with building new or upgrading existing premises (for example building, plumbing, electrical etc);
 - o purchase of an existing property; or
 - o purchase of land.
- 4.2. Supporting the purchase of major equipment, any subsequent commissioning of that equipment and potentially refurbishing of facilities to house the new equipment.

Non-capital costs equivalent to not more than 5% of the funding may be considered for activities which are required to set up any structures needed to manage the infrastructure, for example, professional fees, governance structures, and legal fees related to the establishment of a business. Reasonable contingency fees, for possible cost escalations, may also be included.

SIEF funds would not normally be available for operational costs or minor capital works, maintenance projects, recurrent funding, or any activities outside the research sector. Funds identified as leverage investment by the collaborators may include operating costs **directly** <u>required for operation of the facilities</u> (eg specialist technicians to run equipment, operating and maintenance cost).

5. Relationship to Other Programs

SIEF is not a substitute for existing programs. Rather it is to be considered complementary to other funding programs for research infrastructure (such as the National Collaborative Research Infrastructure Strategy), with a particular emphasis for SIEF on funding activities that catalyse the development of globally relevant national research precincts involving major collaborative investments by key research partners from across the NIS in areas of priority.

The Fund aims to catalyse co-location of large critical masses of capability in key areas of research across Australia, such as:

- Eco-Sciences Precinct (Brisbane, QLD)
- Natural Sciences Precinct (Canberra, ACT)
- Manufacturing & Materials Sciences Precinct (Clayton, VIC)
- Resources Sciences Precinct (Perth, WA)
- Health Sciences Precinct (Parkville, VIC)
- Information, Communication & Services Sciences Precinct (Sydney, NSW)

6. Eligible Applicants

National and international universities, Publicly Funded Research Agencies (PFRAs), and other research focussed institutions are eligible to apply. Collaborative activities (involving more than one institution) are essential. Infrastructure activities should be led by research institutions but the involvement of the private sector and industry consortia is greatly encouraged.

7. Evaluation Criteria

This section of the Guidelines contains information relating to the evaluation criteria for Research Infrastructure activities that may be supported by SIEF.

Evaluation Criteria 1:

Activities should address infrastructure priorities for developing national research precincts.

- a. Extent to which the activity addresses the capability and infrastructure needs of a national research hub.
- b. Alignment of the activity with the priorities and strategic objectives of the collaborating organisations.

Proponents must demonstrate that their activity addresses the long term aims of building global scale critical mass around one of the national research precincts identified in section 5 and that it represents a significant investment in the long term capability needs of this research area.

- Will this activity lead to the creation of world-leading research capabilities and results?
- Will this activity lead to greater domestic and international research collaborations and outcomes?

Evaluation Criteria 2:

Activities should demonstrate high benefits and effective use of resources.

- a. Degree of projected positive impact on enhancing capacity.
- b. Extent to which the proposal is 'additional' and/or complementary to existing research infrastructure.

Activities will be evaluated against the extent to which they deliver on the SIEF's objective of strategically transforming the capacity of Australian research in the areas of priority. All RI activities must demonstrate the extent to which the activity will transform the capacity of a) each of the collaborating institutions, and b) their nominated research hub. In addressing this criterion, proponents may wish to consider the following sector specific questions:

- Will this activity facilitate new types of world-leading research?
- Will this activity foster the retention of early stage or mid career researchers?
- Will this activity contribute to economic development, national security, social wellbeing and/or environmental sustainability?
- Will this activity develop or support international leadership in the nominated area for Australia, and does it have the potential to be of global scale and world-class?
- Will this activity provide access to researchers from other institutions?
- Where are the equivalents of this scale in the world?
- Why does Australia need this capability at this time?

Evaluation Criteria 3:

Activities should utilise capital funding to efficiently address infrastructure needs.

- a. Extent to which the activity results in improvements consistent with the level of investment (ie. value for money).
- b. Extent of co-investment and collaboration around investments of global scale.

Proponents must demonstrate in their plans that activities would provide good value for money, have a clear public or industry benefit and deliver improvements that are both significant and strategic.

Proponents must demonstrate in their activity plans, where possible, how the activity will make a positive long term economic contribution to the region of investment. This may be demonstrated by reference to the economic benefit of the activity to local communities, a broad industry group, or through an increase in research activity, higher education or vocational education and training.

Proponents should quantify, where possible, the expected social, economic and environmental returns on the SIEF investment in terms of a cost / benefit assessment.

Evaluation Criteria 4:

Activities should demonstrate they achieve established standards in implementation and management.

- a. Readiness of the collaborating organisations to implement the proposed infrastructure if successful.
- b. Capacity of the collaborating organisations to support, maintain and integrate new infrastructure into ongoing business operations.

The strength and readiness of activities will be an important consideration in assessing options for SIEF RI funding.

In addressing this criterion, proponents may wish to consider the following:

- Have you considered a range of options for achieving the outcomes of the activity?
- · Why does this activity represent the most effective, strategic option?
- Do you have, or can you acquire, the management expertise, the planning and project management skills, and all other components necessary for the investment to be successful?
- Has the activity been developed with a view to maximising environmental sustainability?
- · Have you consulted with all the key stakeholders relevant to the activity where appropriate?

8. Key Contacts & Approach

The SIEF Trustee is not intending to conduct a broad application process for RI proposals. With the support of the Advisory Council and SIEF Manager the Trustee intends to identify strategic infrastructure investment opportunities in line with the areas of priority shown in section 5 above. The Trustee will proactively conduct strategic analyses of major RI investment opportunities and catalyse proposal development with key collaborative partners from across the national innovation system.

The key contact for further information and development of investment prospects is the SIEF Manager. The SIEF Manager can be contacted via the email address: sief@sief.org.au