ARC Linkage Projects: what does the ARC want?

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Linkage Projects objectives

- The objectives of the *Linkage Projects* scheme are to promote:
  - initiation and/or development of long-term strategic research alliances between higher education organisations and other organisations, including industry and end-users, in order to apply advanced knowledge to problems and/or to provide opportunities to obtain national economic, social or cultural benefits;
  - the scale and focus of research in the Strategic Research Priorities;
  - opportunities for researchers to pursue internationally competitive research in collaboration with organisations outside the higher education sector, targeting those who have demonstrated a clear commitment to high-quality research; and
  - growth of a national pool of world-class researchers to meet the needs of the broader Australian innovation system.
ARC Linkage Project Selection Criteria

Investigator(s) (20%)
• Research opportunity and performance evidence (ROPE)
• Potential to engage in collaborative research with end-users
• Time and capacity to undertake and manage the proposed research in collaboration with the Partner Organisation(s)
Investigators/Research team

- Although the success rate for Linkage is ~40%, there is a large degree of self-selection in application, and only top-grade teams are successful.
- If some of the CIs have only modest research and publication track records (accounting for opportunity), it is essential that the team is balanced up with CIs with very strong track records (essentially the team needs to be just as competitive as for Discovery).
- Likewise, if some CIs have little or no experience with industry/community collaboration, it is essential to balance the team up with CIs that have had such experience.
- Make sure that evidence about external collaboration, consulting or contract research, creation and commercialisation of research-derived IP, previous industry experience etc is clearly visible in the CI profiles.
- It is very important that people with credible R&D credentials from the industry-partner organisation(s) are included on the PI list (eg not just the CEO or COO), so that the connection to the product or process/policy development directions of the partner are clear, and the engagement of the partner in the research is reinforced.
ARC Linkage Project Selection Criteria

Proposed Project (50%) comprising:

Significance and Innovation (25%)

- Does the research address an important problem?
- How will the anticipated outcomes advance the knowledge base?
- Are the Project aims and concepts novel and innovative?
- Will new methods or technologies be developed?
- Will the proposed research provide economic, environmental and/or social benefit to Australia?
- Does the Project address the Strategic Research Priorities?
- Will the Project benefit Partner Organisation(s) and other relevant end-users?
- Does the project significantly enhance links with organisations outside the Australian publicly-funded research and higher-education sectors?
ARC Linkage Project Selection Criteria

**Approach and Training**  (15%)
- Are the conceptual framework, design, methods and analyses adequately developed, well integrated and appropriate to the aims of the Project?
- Where relevant, is the intellectual content and scale of the work proposed appropriate to a higher degree by research?
- How appropriate is the proposed budget?
- Does the project represent value for money?

**Research Environment**  (10%)
- Is there an existing, or developing, supportive and high-quality Research Environment for this Project, both within the Administering Organisation and in the Partner Organisation(s)?
- Are the necessary facilities to complete the Project available?
- Are there adequate strategies to encourage dissemination, commercialisation if appropriate, and promotion of research outcomes?
The project

- The project must involve research which is has challenge and risk in absolute terms—not routine application of known principles to a specific scenario, for which consulting might be more appropriate.
- The project must have the potential for significant outcomes in terms of new or enhanced products, processes, policies etc for the partner(s). The significance to the partner’s business must be addressed—make sure this is central to the business, not some peripheral thing that is unlikely to be taken up.
- State clearly how the project will address the Strategic Research Priorities—not only the first-order outcomes for the partner (new products, processes etc) but also the benefits to the ultimate end-users of the products/processes.
- In the approach, make sure that the role of the PIs in the research is clear, and that they are substantially involved.
- Training is important, particularly in the context of industry collaboration—this applies not only to any students involved, but also to any early-career researchers, and to CIS who have had little or no industry collaboration experience.
- Whoever is managing the project, having a clear partner liaison plan is essential—many a beautiful friendship has come to grief over a mismatch in expectations of roles and outcomes.
- The issue of managing the collaboration is very important—unless the project is big enough to have a dedicated Project Manager, one of the CIs or PIs has to do this. Often the best person to do this role is one of the PIs—this strengthens the proposal because the project will more likely be steered towards what the partner wants, and again reinforces engagement of the partner.
Strategic Research Priorities

Living in a changing environment
• Identify vulnerabilities and boundaries to the adaptability of changing natural and human systems
• Manage risk and capture opportunities for sustainable natural and human systems
• Enable societal transformation to enhance sustainability and wellbeing

Promoting population health and wellbeing
• Optimise effective delivery of health care and related systems and services
• Improve the health and wellbeing of Aboriginal and Torres Strait Islander people

Managing our food and water assets
• Optimise food and fibre production using our land and marine resources
• Develop knowledge of the changing distribution, connectivity, transformation and sustainable use of water in the Australian landscape
• Maximise the effectiveness of the production value chain from primary to processed food
Strategic Research Priorities

Securing Australia’s place in a changing world

• Improve cybersecurity for all Australians
• Manage the flow of goods, information, money and people across our national and international boundaries
• Understand political, cultural, economic and technological change, particularly in our region

Lifting productivity and economic growth

• Identify the means by which Australia can lift productivity and economic growth
• Maximise Australia’s competitive advantage in critical sectors
• Deliver skills for the new economy

Commitment from Partner Organisation(s)  (30%)

• Is there evidence that each of the Partner Organisation(s) is genuinely committed to, and prepared to collaborate in, the research Project?

• Will the proposed research encourage and develop strategic research alliances between the higher education organisation(s) and other organisation(s)?

• Is the budget justification for Cash and In-kind Contributions adequate?
Partner organisation

- Assuming there is a top quality (university) research team, most Linkage Project applications that fail, do so because the project doesn’t really address an important issue for the partner(s), and the engagement of the partner appears nominal (remember this is 30% of the assessment)
- It is important that there is evidence of successful initial collaboration, so that the risk of an underdeveloped or untested relationship is minimised
- It is not possible to create a successful Linkage Project application overnight-if there is the sense that the relationship is still finding its way, best to build on what you have for next time
- Clear engagement of the partner with the research project is essential (I say it again!)
- Overseas organisations are eligible to be partners but the benefit to Australia must be clearly identified
- Substantive cash contributions from the partner(s) are important since this goes to the heart of the commitment of the partner to the project-it is best to test this out early on in the relationship (the Olympic Torch project-a painful lesson!)
Some final words..

- Linkage Project grants are not easy money—they are hard to get, they present management as well as technical challenges, and consequently have comparatively high risk of failure.

- One key difference from Discovery projects is that you as a CI have to accommodate someone else’s (the partner’s) agenda, not just work to your own—it is important to understand this from the start, and to build the relationship so that the potential clash of agendas can be anticipated and dealt with.

- Notwithstanding, successful Linkage projects are very rewarding—most researchers want to make a difference and this is a good way to achieve that. The relationships that emerge are extremely valuable and not only lead to more opportunities to work with the original partner(s) but also to opportunities to work with new partners, often through the organisational networks you can gain access to through the original partners (yellow lasers!)

- Developing industry partnerships takes persistence but over time you can achieve real momentum, and thereby a level of security of research funding which is going to be very difficult to maintain in the future by any other means.