



Monash University

Linkage Projects Scheme

September, 2007

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Mission

‘To advance Australia’s research excellence to be globally competitive and deliver benefits to the community’

Reflects a focus on excellence of the funded research, as well as outcomes, including:

- commercial benefits
- broader benefits to the community



National Competitive Grants Program

(FY 06/07 \$570M)

Discovery (DP, IRD and Fed Fellows)

excellent research by individuals and teams

(FY \$290M)

Linkage (LP, LIEF and LX)

collaborative research and infrastructure use - national & international

(FY \$170M)

Centres

(Centres and Research Networks)

national centres of research excellence

(FY \$110M)



ARC directions

- Building scale and focus
- Emphasis on cross-disciplinary approach to solving problems
- Building linkages between researchers and end-users
- Engagement with community
- Increasing internationalisation
- Attracting and retaining excellent people
- Emphasis on performance and accountability



Eligibility Checks: All Schemes

- ARC checks based on scheme Funding Rules
 - as proposals are logged into system
 - before Panel/SAC mtgs (ARC staff & College memb'rs)
 - during Panel/SAC meetings
 - prior to recommendations to Minister
- Eligibility checks may occur any time
- Two committees evaluate potential ineligibilities
 - ARC internal
 - Panel/SAC during meetings
- A third committee hears appeals



Common Reasons for Ineligibility

- Incomplete applications
 - Pages/sections missing
 - Letters missing
 - Current/past funding list inaccurate/incomplete
 - Signatures missing
 - Reports missing
- Centre overlap – letter not included or explanation not accepted
- NH&MRC Overlap
- Eligibility criteria for particular investigator roles
- ***Limits on numbers of projects or applications***



If RO/Researcher is unsure

Eligibility Rulings

- Most ARC Schemes have formal processes for requesting rulings
 - apply for an exemption or ruling
 - scheme 'Eligibility Ruling Request Form'

Seek clarification

- Contact your Research Office
 - ARC Assistant Director for scheme

The closing time is **THE** closing time

- Last minute additions/replacements
 - emails & faxes will not be accepted



Conflict of Interest

- Clarification of Col responsibility
 - all parties involved in, or associated with proposals
 - required to disclose to the ARC and to all other parties on proposal
 - disclose manner/methods to manage the Col
- Common with LP Scheme due to other affiliations and/or POs
- Eligibility exemption request can be sought



Strategies to Manage Cols

- If on a Board, absent the CI/PI from the meeting while decision is made
- Depending on size of project, form a management committee with clearly defined representation for all parties (note key CI may also absent from decisions)
- Use an independent third party to negotiate key issues for agreement between AO and PO; follow above
- Extreme case: CI resign from Board of PO



Linkage Projects

- **Primary aim**
 - Encourage cooperative research
 - Strengthening Australia's & international innovation system
 - Economic, social, environmental, policy or scientific benefit
- **Participant roles**
 - Chief Investigator, Partner Investigator
 - APAI (Aust. Postgraduate Award, Industry)
 - APDI (< 3 years from PhD),
 - Linkage Industry Fellowships (LIF)
- **Partners**
 - Private sector; private non-profit org; Govt org not principally funding research, evaluation and/or consultancy.
 - Does not fund clinical medical and dental research & training



Importance of Co-Funding

- Co-funding is a “revealed preference”
 - confirmation of research need
 - “pre-selection” process
- Co-funding is quantifiable
 - **\$ ARC + \$ co-funder = \$ project**



- Happy co-funders are influential spokespersons
 - to whom others really listen



Linkage Projects

Timing	2 rounds per year; close May and November
No. of active projects	~1,500
2007 allocation for new grants	\$120M
% of total ARC funds	~20%
Project duration	1 – 5 years, normally 3 years
Project size	\$20k to \$500k pa; average \$101k pa
No. of CIs per project	2.2
No. applications per yr	~1,100
Success rate	44.2% for LP07 R1&R2
Partner Contributions	If no APAI, match ARC with in-kind (\pm cash) If < \$500K pa, match 20% of ARC as cash If > \$500K pa, match 50% of ARC as cash



Linkage Projects

- **Selection Criteria**

- Investigators' Track Record 20%
- Project significance and innovation 25%
- Project approach and training 20%
- Project national benefit 10%
- Collaborating Organisation commitment 25%



Linkage Projects

Funding Year	Proposals received*	Requested (\$M)	Number Funded	Allocated (\$M)**	Success Rate (%)
1998	742	125.0	345	50.6	46.5
1999	873	130.0	407	51.7	46.6
2000	982	152.0	458	58.9	46.6
2001	1,085	168.8	485	62.1	44.7
2002	908	146.6	470	72.7	51.8
2003 (R1&R2)	1,175	231.0	588	101.1	50.0
2004 (R1&R2)	1,047	225.3	532	115.2	50.8
2005 (R1&R2)	1,048	255.8	488	111.4	46.6
2006 (R1&R2)	1,106	308.1	400	110.5	36.2
2007 (R1&R2)	957	333.2	425	119.7	44.4

* excludes withdrawn proposals; **excludes half-yr extensions for APAIs



Linkage Projects 2007

Discipline	Applications		Funded		Success rate	
	Rd 1	Rd 2	Rd 1	Rd 2	Rd 1	Rd 2
BSB	92	117	40	53	43.5%	45.3%
EE	104	80	38	37	36.5%	46.3%
HCA	44	45	19	21	43.2%	46.7%
MIC	40	46	20	22	50.0%	47.8%
PCG	42	39	21	18	50.0%	46.2%
SBE	163	146	70	66	42.9%	45.2%
Total	485	473	208	217	42.9%	45.9%



Linkage Projects 2007

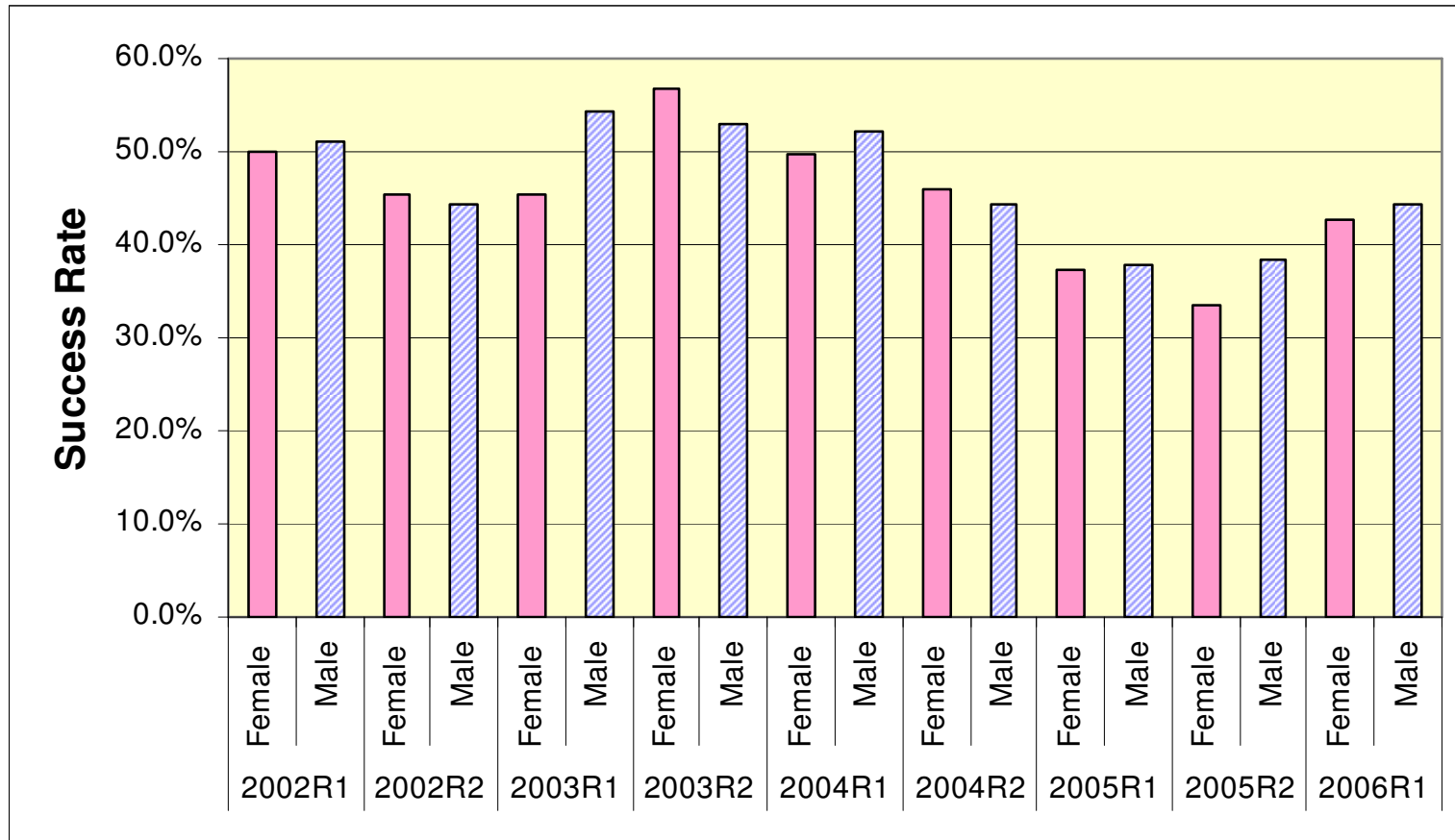
Average Size

Component	Round 1 for projects commencing in January 2007		Round 2 for projects commencing in July 2007	
	Average first year allocation	Percentage of average first year request	Average first year allocation	Percentage of average first year request
LP	\$102,035	73.4%	\$97,067	70.4%
LA	\$29,975	98.1%	\$30,475	97.9%
Linkage	\$96,131	73.9%	\$92,157	75.4%



Linkage Projects Scheme

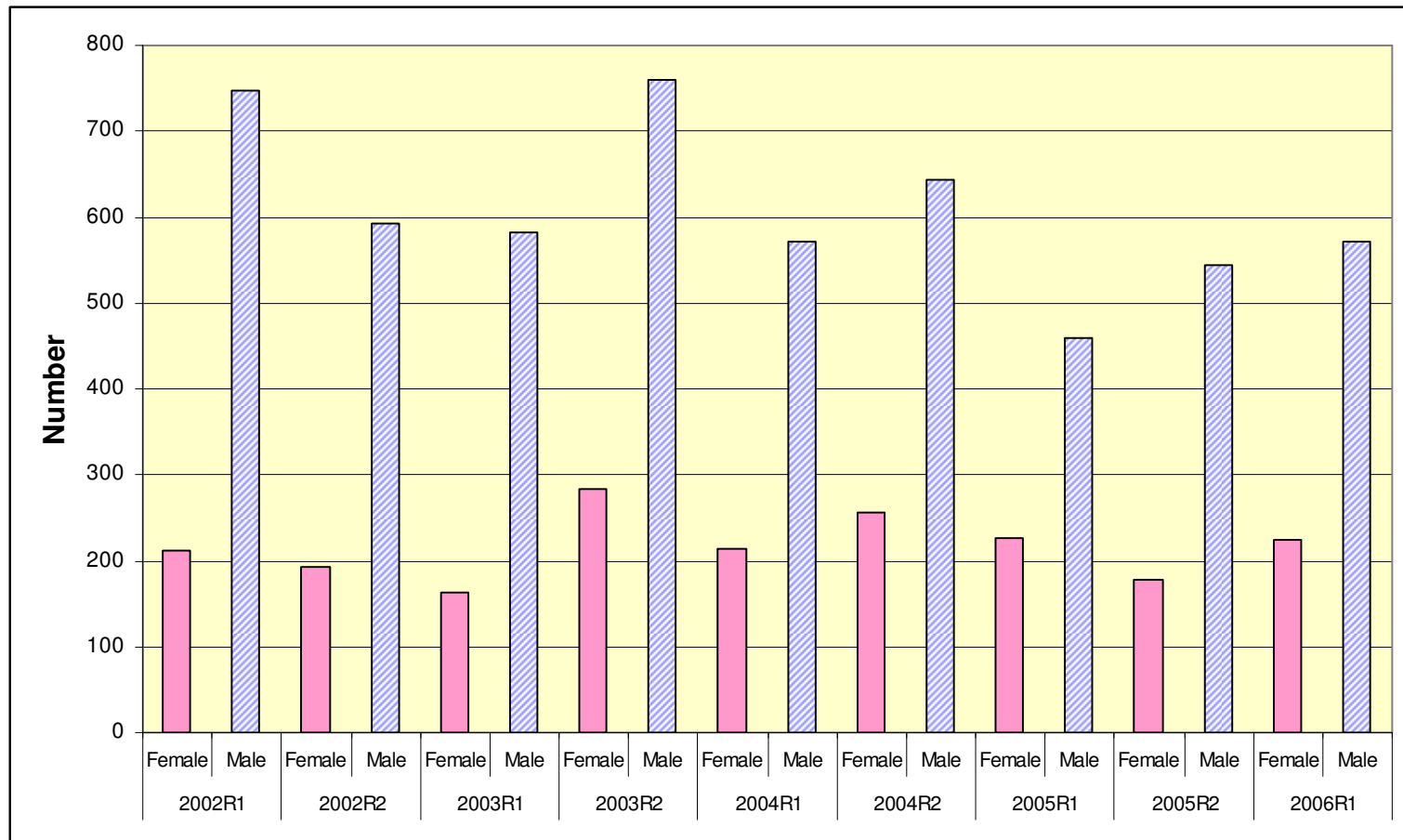
Gender by Submit Year





Linkage Projects Scheme

Gender by Submit Year





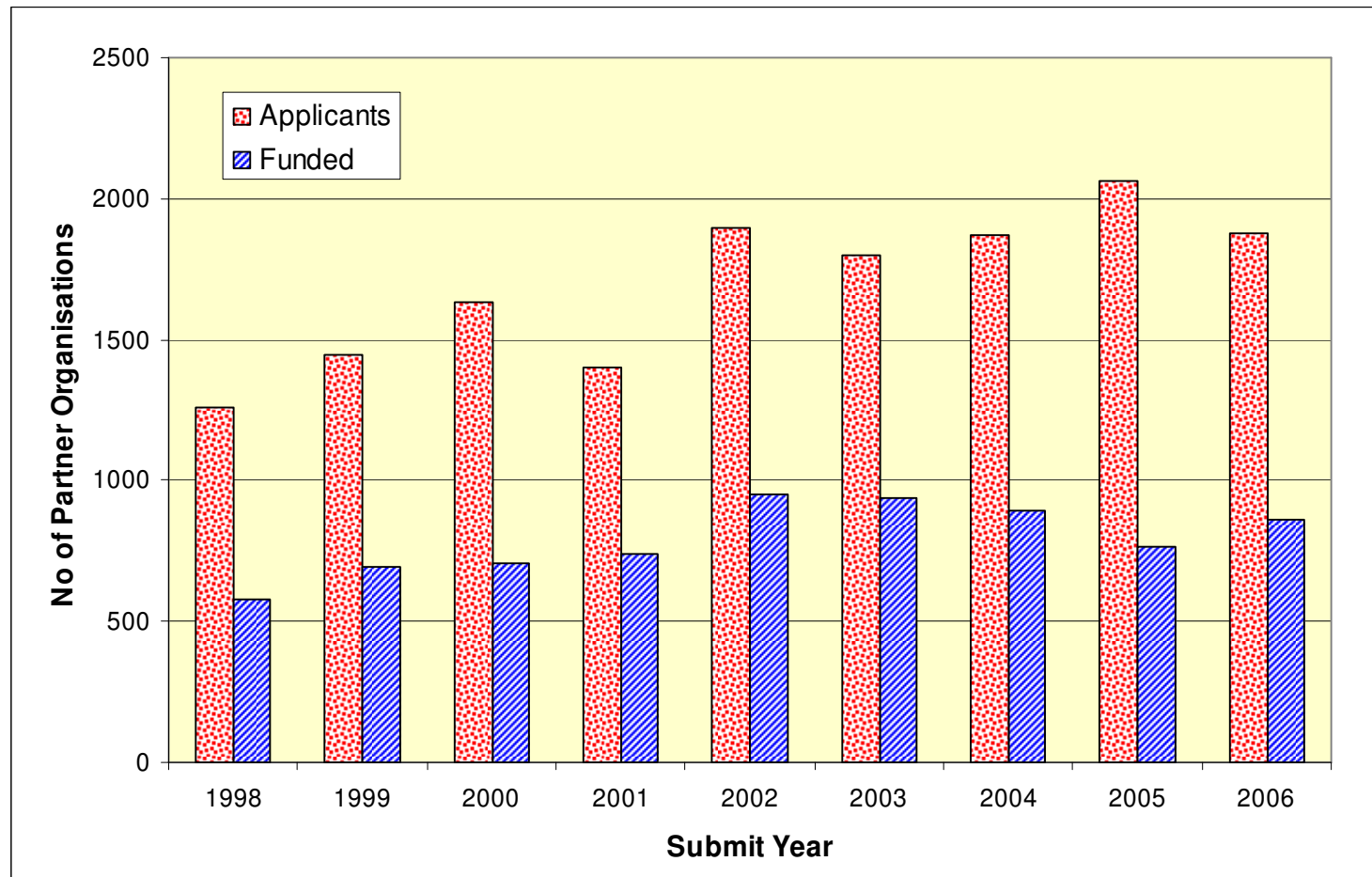
Partner Organisation Commitment Linkage Projects 2006

Category	Cash		In-Kind		Total	
	\$m	%	\$m	%	\$m	%
Private Companies						
Australia	21.5	35.7	45.1	39.2	66.6	38.0
International	15.5	25.6	17.8	15.5	33.3	19.0
Sub-total	37.0	61.3	62.9	54.8	99.9	57.0
Non-Profit Orgs						
Australia	4.6	7.6	14.8	12.9	19.4	11.1
International	1.9	3.1	1.4	1.2	3.3	1.9
Sub-total	6.5	10.7	16.2	14.1	22.6	12.9
Government Agencies						
Australia-State&Local	13.0	21.6	28.1	24.5	41.1	23.5
Australia-Commonwlth	3.2	5.3	4.0	3.5	7.3	4.1
International	0.7	1.2	3.6	3.2	4.3	2.5
Sub-total	16.9	28.1	35.8	31.1	52.7	30.1
Total	60.4	100.0	114.9	100.0	175.2	100.0



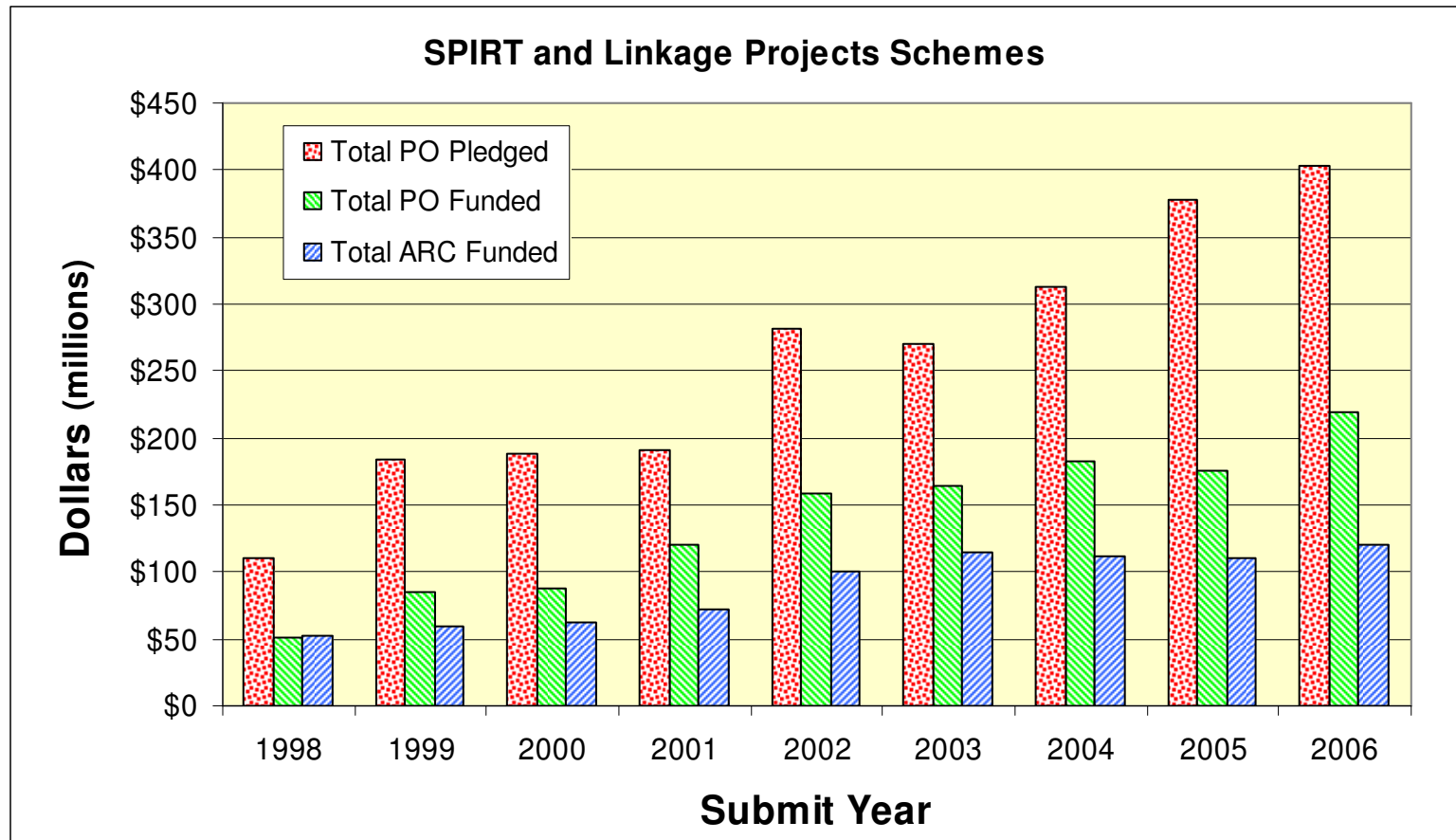
Number of Partner Organisations

SPIRT and Linkage Projects Schemes



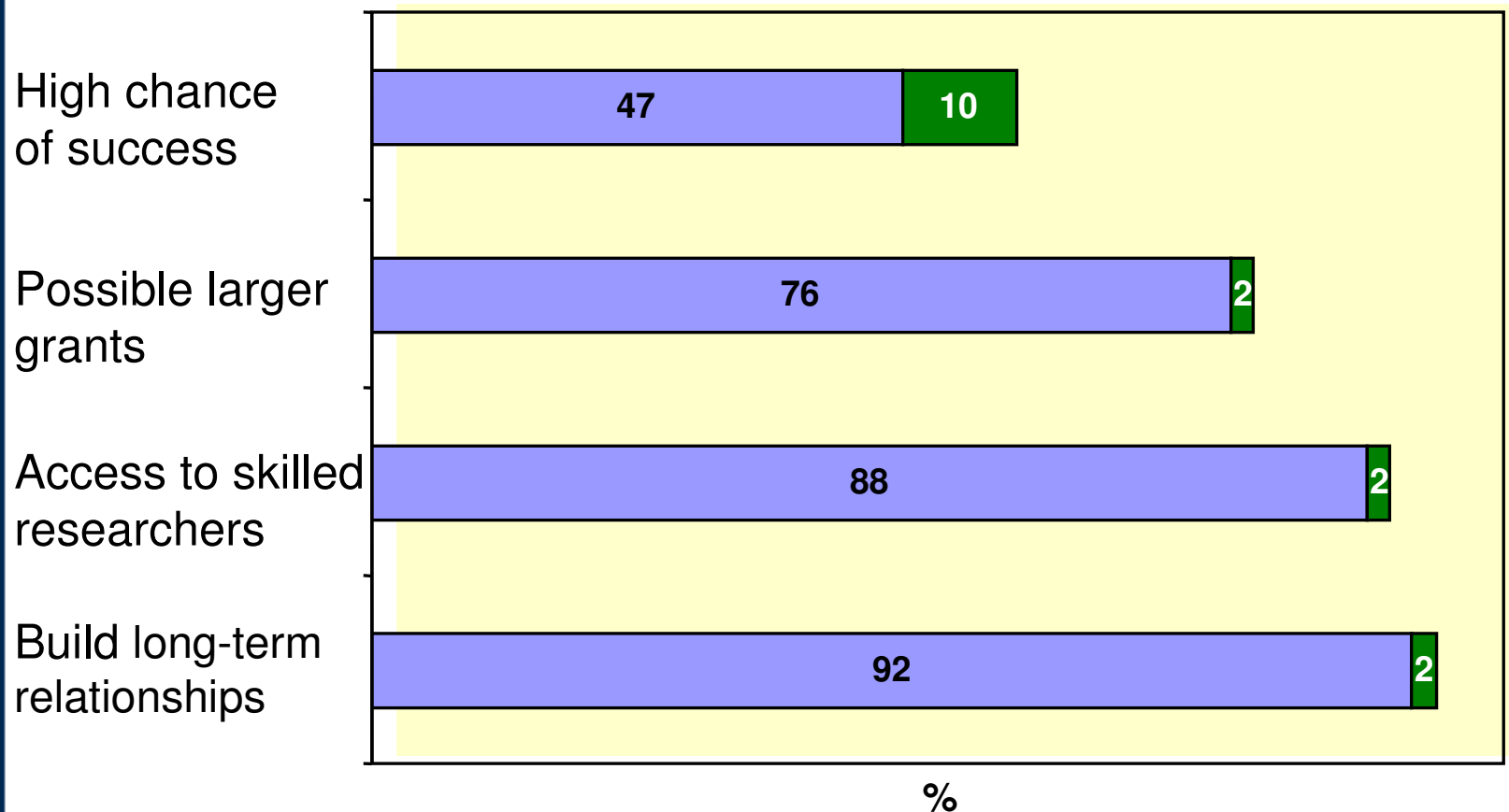


Partner Organisation Commitment





Partner Organisation Views: Why Use LP?



■ Important ■ Not Important



Examples of Partner Organisations

Alchemica Pty Ltd
BAE Systems Australia
Bartlett Grain Pty Ltd
CSL Limited
Fertility Control Pty Ltd
Hydro Tasmania
Lastek Pty Ltd
Leica Geosystems
National Australia Bank Ltd
Native Seeds Pty Ltd
OneSteel Manufacturing Pty Ltd
Orica Australia Pty Ltd
Polarised Technology Pty Ltd
Ridley Aqua-Feeds Ltd
Ronin Films
Saltgrow Pty Ltd
Santos Limited
Sialon Ceramics Pty Ltd
Suncorp General Insurance
Tissue Therapies Limited
Ulan Coal Mines Limited
Williams Boag Architects
Wind Prospect Pty Ltd

Dupont-Pioneer
Kaltim Prima Coal
Microsoft Research
Ocean Powder Delivery Ltd
Sprint Advanced Technology Labs
Yokogawa Electric Corporation

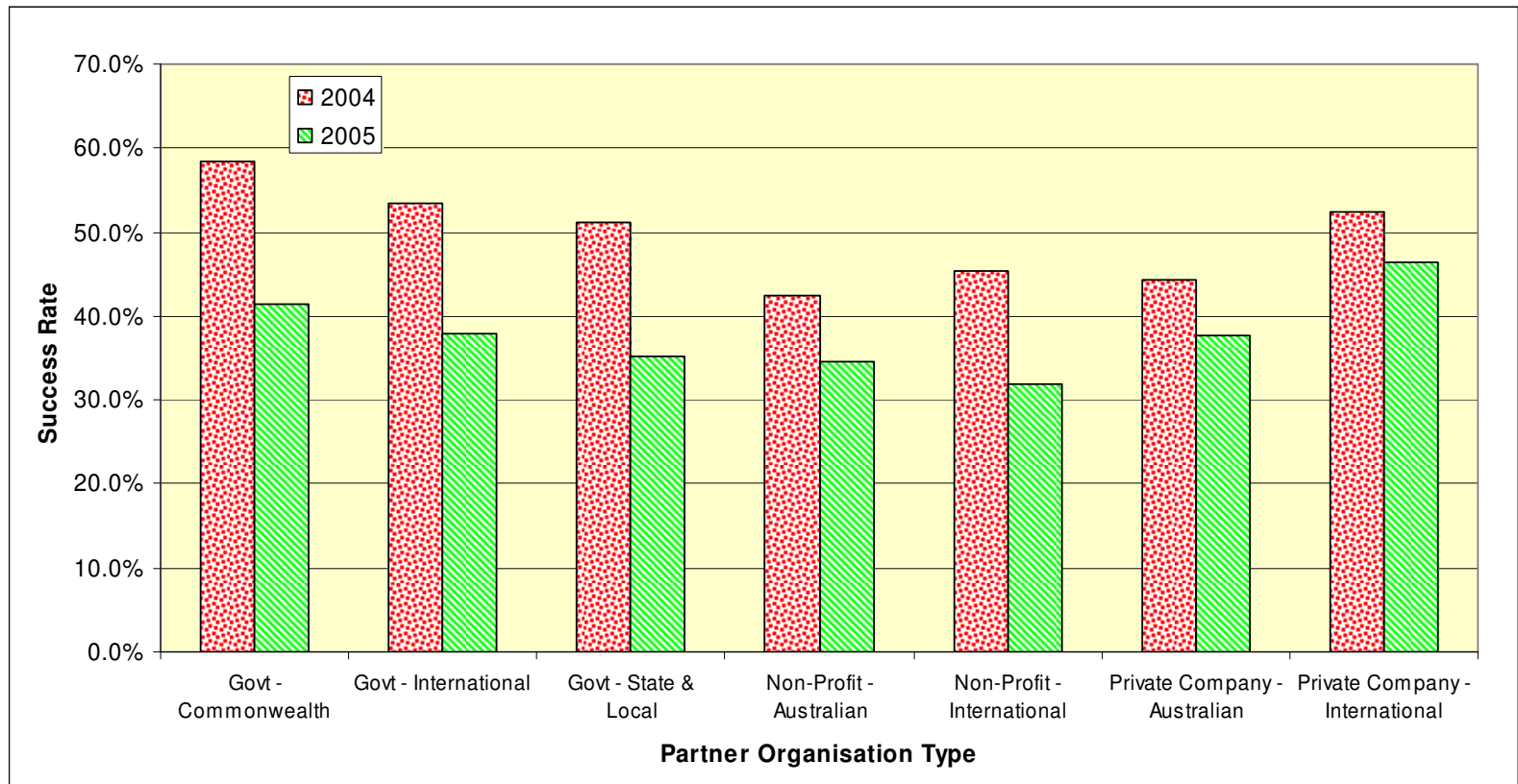
Aged Care Queensland Inc
Agricultural Producers Commission
AIDS Council of NSW
Alzheimers Australia SA
Australian Football League
Australian Macadamia Society
Brotherhood of St. Laurence
Diabetes Australia (NSW)
Flora Hill Secondary College
Lifeline Australia Inc
Linux Australia Inc
Macquarie Library Pty Ltd
Neporendi Aboriginal Forum Inc
Oxfam Community Aid Abroad
Royal Flying Doctor Service
St Vincent de Paul Society

Australian Museum
Barwon Health
Bouliia State School
Central Darling Shire Council
City of Greater Geelong
City of Rockingham
Dept of Environment (WA)
EPA Victoria
Geological Survey of Victoria
Gippsland Coastal Board
Healthy Waterways
Legal Aid Queensland
Maribyrnong City Council
Midland Redevelopment Auth
Museum Victoria
NSW Fisheries
NSW Police
QFleet
Vic Roads
VicUrban
Westmead Hospital
Australian Federal Police
Australian Institute of Sport



Partner Organisation Type

Success Rate





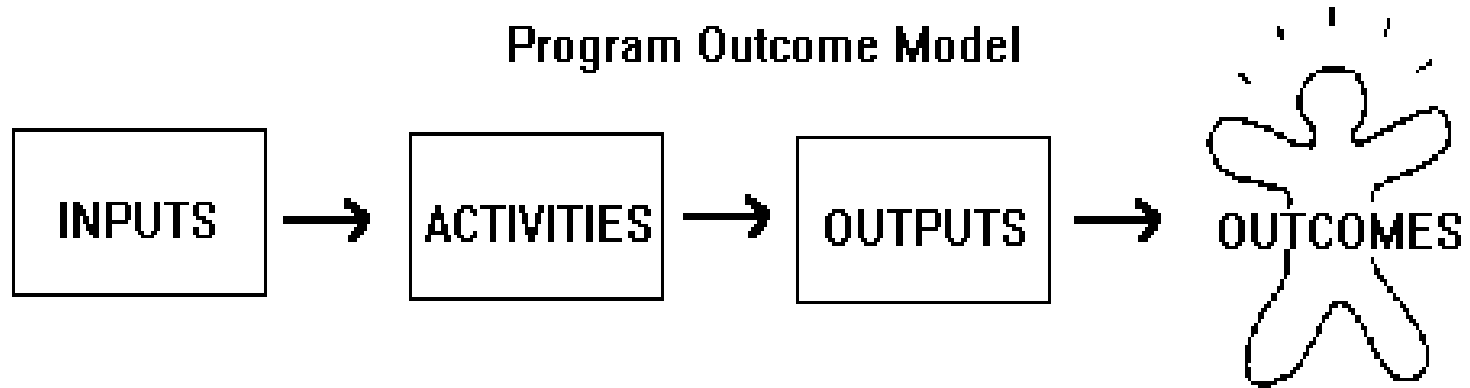
Defining “Outcomes”

A “research outcome” is a tangible consequence of ARC funded research that *“advances Australia's research excellence to be globally competitive and deliver benefits to the community”*.

i.e. addresses the Mission



Where & Why “Outcomes”?

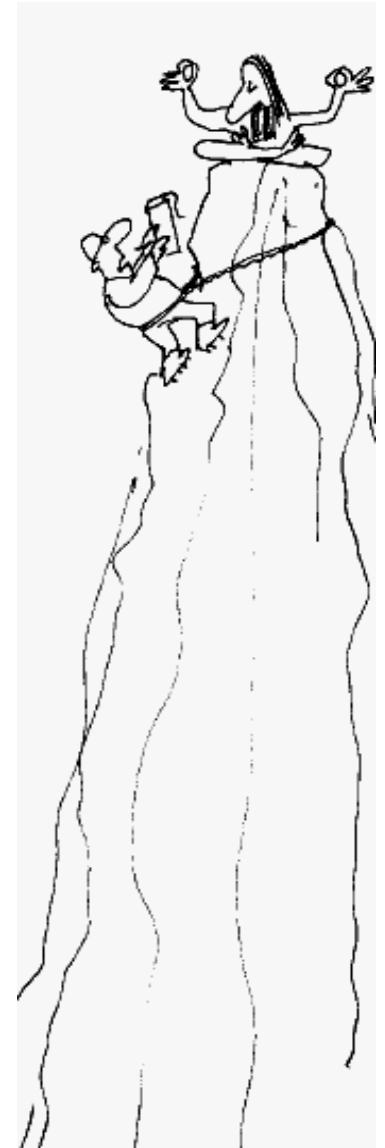


Real outcomes from ARC-funded research are a reasonable expectation of Government and the tax-payer



Need for “Outcomes”

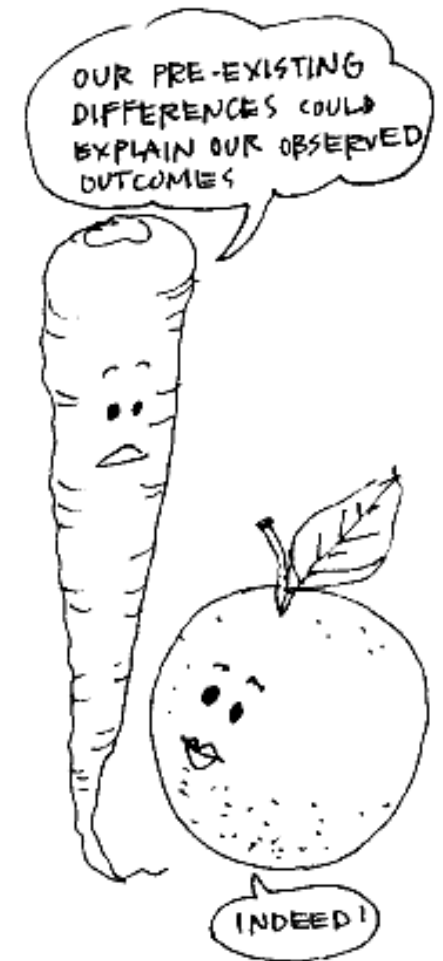
- Contribute to National Research Priorities
 - *environmentally sustainable Australia*
 - *promoting & maintaining good health*
 - *frontier technologies transforming industry*
 - *safeguarding Australia*
- Validate expenditure of public money *and*
- Justify levels of ARC budget allocation





Types of “Outcomes”

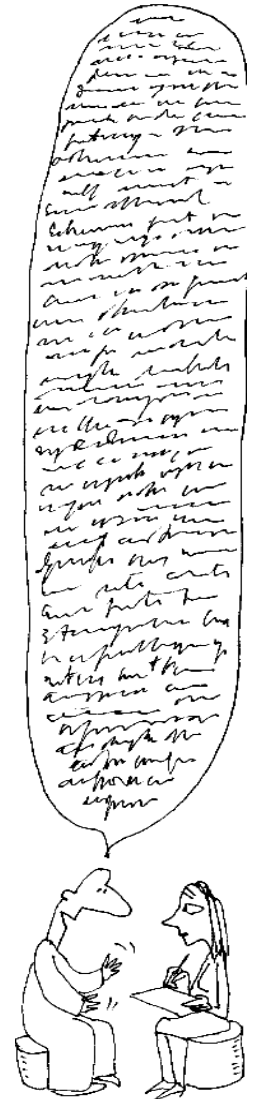
- Economic
 - *generate wealth; create employment in sustainable industries*
- Social
 - *improve equity, quality of life; reduce social risk*
- Environmental
 - *protect/restore environment; sustainable development*
- Policy & Administration
 - *improve decision making & governance*
- Scientific Advancement
 - *understanding ourselves & nature!*





Communicating Outcomes

- Writing in plain English is a good start!
- Identify key message(s) you wish to send and potential impact
- Tailor the message to your audience
 - explain it to your mum (**KISS principle**)!
 - taxpayers will support what they understand
- Reinforce the message
 - words & pictures; examples; what it means
- Be enthusiastic!





Example: Economic & Scientific

- A 2000-2002 SPIRT project (ARC \$318,585 + industry co-funding) studied a potential new epithermal mineral province
- Researchers from U Tas. identified strong regional indicators of gold-rich fluids
- Led *directly* to discovery of 3.1 million ounces of gold worth \$2.4 billion!





Example: Environmental & Economic

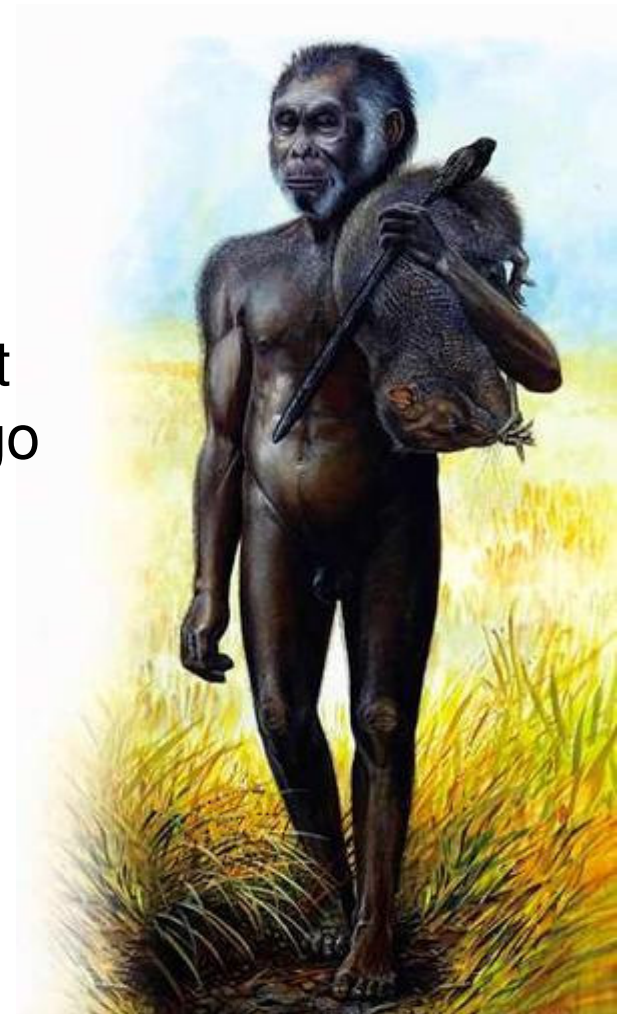
- 00-02 SPIRT project (ARC \$126k + industry co-funding)
UNSW, ANU & SCU studied soil/water chemistry in cane farms (acid sulphate soils)
 - driven by 1987 Tweed fish kill
 - natural pyrite in sediment
- Changed land use practices
 - contain acid production & run-off *via* water table management
- Implemented best practice *via* mill co-operative
 - 100% compliance after 2 years
 - acidic flux during floods ↓ 90% & production ↑ 30%
 - William McKell Award
 - now whole-of-government land use policy across Australia





Example: Knowledge Advancement

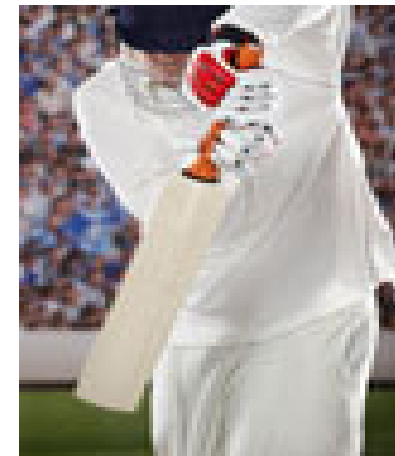
- ARC-funded UNE, U Woll. & Indonesian scientists discovered *Homo floresiensis* on Flores
- Co-existed with, maybe wiped out by modern humans 12,000 yrs ago
- Described as “one of the most stunning anthropological discoveries in the past 50 years”.
 - implications for the understanding human evolution.





Example: Social (!)

- 02-04 Linkage Project (ARC \$117k + industry funds) for a dynamic study of cricket bat.
- RMIT researchers identified regions of high strain & vibration in the bat
- Designed, tested and simulated a piezo-electric control circuit
- Produced first “smart cricket bat” to reduce the “zinging effect” felt by big-hitting batsmen
- In 2007, the technology patented – active vibration control Smart Cricket Bat - \$100 more per bat.





To Summarise

- LP proposals require *preparation* – involves longer lead time
- Establish a long-term relationship with strategic partner(s)
- Plan/discuss in terms of outputs & outcomes
- Sort out IP early and clearly; establish fundamentals of contractual arrangements early
- Appreciate the “cash leverage” – about 2:1 – for the partner organisation
- Establish regular & alternate communication channels within the R&D group
- Flexibility in workplace location/operation – look for best use of resources & optimum outcomes
- Discuss with your Research Office staff



Thank you