



Response to the Framework Consultation

National Research Priorities

Powerhouse Museum, 13 June 2002

The Australian Business Foundation is an independent, not for profit private sector think-tank founded and sponsored by the leading industry organisation, Australian Business Limited. The interest of the Australian Business Foundation in the framework for Australia's National Research Priorities stems from the mission of the Foundation—to conduct and disseminate ground-breaking research that advances knowledge and fosters new thinking and best practice on Australia's competitiveness, prosperity and jobs. With this as our focus, we have the following comments to make on the current proposed framework.

- Using a framework to set the subject matter of National Research Priorities is only half the task. Frameworks must also include mechanisms for capturing and sharing knowledge generated by research priorities. An integral part of the framework of setting National Research Priorities must be requirements to communicate and apply the intelligence from the research to maximise Australia's knowledge base and competencies.
- There seems to be an ambivalence in the existing framework for the development of National Research Priorities between a desire to coordinate priorities for research at the national level, while at the same time recognising the reality of priorities and programs determined by individual portfolios and agencies. "Setting national research priorities will complement and enhance existing priority setting processes within research agencies and funding bodies."¹ The existing framework does not provide an explicit method to determine how this complementarity will be ensured. The Australian Business Foundation suggests that futures thinking methodology offers a process by which to unify these different interests in the setting of National Research Priorities.

¹ DEST. 2002. *Developing National Research Priorities: An Issues Paper*. P. 13

- The Australian Science and Technology Council (ASTEC) carried out an extensive foresighting study in 1994/1995, *Matching Science and Technology to Future Needs 2010*; much of the information in its numerous publications would bear re-examination in the determination of a framework for National Research Priorities.
- Futures thinking, scenario planning and foresighting as a framework for the selection of National Research Priorities would ensure that the research we prioritise in 2002 is still of relevance to the Australia of tomorrow. This is particularly important within the science, engineering and technology sector where research is particularly focused on satisfying needs into the future as well as in the present.
- To incorporate such futures thinking into National Research Priorities, the following common steps are evident in most foresighting and scenario planning exercises. These steps are taken from the work of Keith Suter, a senior fellow of GBN and a member of the Australian Business Foundation and Kees van der Heijden, one of the world's foremost authorities on scenario planning.

1. Work out the basic issue, problem to be solved or key focal question.

For example in the case of the National Research Priorities: "To identify and address areas of strength, opportunity or need where an increase in research effort would make a significant contribution to national wealth and/or well being."²

2. Work out the driving forces for change—social, economic, political, technological, environmental—most likely to affect Australia's ability to create wealth and prosperity. Probe deeper to look at events, patterns and the structure behind the events and trends. In the case of National Research Priorities the aim is to understand how these forces for change will most likely affect where we place our research effort.
3. Substantiate these forces and their interconnections by applying data that you have available on the subject. Use this information to rank these forces for change in order of importance.
4. Based on this thinking and analysis, work out how these forces might play out differently and construct a number of alternative scenarios that Australia's research must address.
5. Relate this futures thinking back to the original goal or focal question. What can be done to respond productively in the light of these alternative scenarios? Are there some priority research themes that contribute to Australia's wellbeing that are relevant to more than one of the scenarios constructed.

- An example of this type of scenario planning and futures thinking can be seen in the work of the Australian Business Foundation with GBN Australia: *Alternative*

² Id. P. 2

*Futures: Scenarios for Business in Australia to the Year 2015*³ identified the following forces of change to be considered in future scenarios for Australia.

- The power of new consumerism—we are likely to see more vocal, informed, active and demanding consumers of aged care and health services. And, in increasing numbers as the population ages and the “baby boomers” bring their “me-generation” demands and accountabilities to their needs as senior citizens. This has the potential to create currently unknown market demands and political pressures on health and aged care services.
 - Electronic and online technologies are likely to create new vehicles for delivering health services, challenging today’s treatments, medical services, specialities, practitioner expertise and cost structures.
 - Technology advances in genetic detection and engineering, nanotechnology and biological sciences are set to transform our concepts of aging, health, wellbeing, prevention and cure. With this comes not only ethical dilemmas, but fundamental policy and management challenges.
- The benefits of futures thinking, scenario planning and foresighting would ensure a dynamic and longer-term relevance for research priorities that may not be achieved with the framework currently proposed. The benefits of this approach is that it is scalable. A futures methodology could be embedded at a number of different levels. The method of setting research priorities offered by a futures approach would ensure a compatibility between the framework determined for national priorities and the priorities set at the agency level.
 - The Australian Business Foundation suggests that—perhaps every three to five years—there is a collective exercise to identify forces of change and alternative futures using the diversity of experience provided by different stakeholders. This would allow the building of a common understanding of forces and drivers for change that Australia’s national research priorities will have to address. From this base, both national bodies (eg. PMSEC), portfolios and specialist agencies can fashion research priorities to meet their own goals, and at the same time, contribute to coherent national research objectives. Such an exercise would ensure continuing relevance in the determination of priorities at the national level and an ongoing congruence with the priorities determined by individual agencies and portfolios.

³ GBN Australia. 2000. *Alternative Futures: Scenarios for Business in Australia to the year 2015*. Sydney: Australian Business Foundation.