



Radical Revamp Of NZ's Scientific Research Capability

- CRIs need greater freedom
- There is too much micro management
- The funding process needs streamlining
- More balanced and comprehensive performance indicators are needed

A radical revamp of NZ's scientific research capability is called for by the Crown Research Institute Taskforce. It says its proposals "represent a rare opportunity to change the face of science in NZ." CRIs should have greater freedom, set their own research priorities, and get to re-invest their surpluses rather than be forced to pay dividends. One Crown entity rather than several should oversee them. A national research infrastructure strategy to rationalise and ensure open access to major research infrastructure is required.

The taskforce, headed by Neville Jordan, says improved performance of CRIs is critical in meeting the challenges fronting NZ. The current science funding system has pushed competition as far as it can go. "The Crown should recognise CRIs are not established with the objective of providing revenue to the Crown." The taskforce wants the Govt to drop its 9% dividend rule: each CRI should retain financial surpluses for re-investment and if a CRI chooses to pay a dividend, this should be retained within a pool available for reinvestment in the broader science system.

Too Much "Micro-Management"

The taskforce calls on the Govt to provide more stable funding for the CRIs. It argues this will make it easier to hold CRIs accountable for their performance. At present CRIs have multiple accountabilities, and they suffer from being "micro-managed" by various arms of Govt. Under the old regime, CRIs had to react to changing priorities set by other organisations. The new approach requires CRI boards to plan and implement a strategy based on their own expert assessment of the work being undertaken

The complexity of current arrangements makes it difficult to identify who is responsible for achieving outcomes. CRI chief executives are responsible to their board and their board in turn is responsible to shareholding Ministers. They also are responsible to the Foundation for Research Science and Technology (FORST) which provides a significant proportion of CRI revenue in the form of contracts for identified research activities. The Ministry of Research Science and Technology also sets accountability requirements for the CRI Capability Fund. Financial performance is managed via the Treasury.

The CRIs employ over 4400 people and receive around \$480m of Govt funding a year. Jordan says "our recommendations do not address CRIs in isolation. They have been designed to accommodate further improvements in the wider RS&T system. The flexibility reflects our view the opportunities and challenges we face as a nation cannot be met by CRIs alone. Universities and independent research organisations have equally vital roles to play, as does NZ business."

The taskforce Chairman (who built up one of NZ's most innovative companies MAS, achieving a successful IPO on the Nasdaq main board in New York) says CRIs are a "rich repository" of science capability. "We have a unique chance to build on their particular strengths and successes."

Streamlining Funding Processes

To ensure CRIs can meet their full potential, Jordan argues they don't at this stage need new money. Rather the attitudes and behaviours of CRIs have to be changed through streamlined funding processes, strengthened governance structures and clarified goals for each CRI. This includes achieving a better balance between money the institutes have to fight for and stable funding.

Currently it is not clear if a CRI's objective is to create value for itself, as a company or to generate value for NZ. The present ownership arrangements seem to place undue emphasis on R&D which produces outputs individual CRIs can capture in their statements of revenue and balance sheets, rather than on research contributing to the well-being and prosperity of NZ.. "This can reduce quite significantly the overall impact of Govt investment in CRIs.. They are heavily dependent on competitive contracts which are often short-term relative to the timeframe in which science produces results.

This makes it difficult for CRIs to operate strategically. We believe existing funding and governance arrangements for CRIs inhibit collaboration, position natural partners such as universities and firms as competitors, and interfere with CRIs adoption of best-practice research management. Governance and institutional arrangements can be considerably simplified so that CRIs have a stronger sense of purpose and direction."

How Success Should Be Measured

The Taskforce calls on the Govt to be more explicit about what it wants each CRI to achieve and fund them accordingly, so they can deliver more for the national benefit. "The measure of a CRI's success should be the positive impact it has on NZ, not the commercial return it has been able to achieve."

CRIs face unnecessary compliance from an "excessive" number of contracts. Core purpose funding should be consolidated into a single contract as soon as possible. The core funding should be negotiated against a rolling five-year research strategy. A greater degree of certainty will enable CRIs to retain and develop capability, manage risk, and operate within a longer time frame. A portion of Vote Research Science and Technology should be set aside for major national collaborative challenges. This would provide incentives for collaboration in new multidisciplinary areas of research.

Better Performance Indicators

CRIs should be measured against more balanced and comprehensive performance indicators. For example technology transfer should be a core responsibility for all CRIs so the benefit of their ideas contributes to the wealth of the whole country, and not just the CRIs balance sheets.

To address the diffuse governance, investment and monitoring arrangements facing CRIs, the Govt should combine its long-term CRI investment, ownership and policy responsibilities into one entity.

For their part CRIs should meet disclosure requirement standards expected of public companies. Govt should require CRIs to hold an annual general meeting, open to the public, and identify the benefits they have produced for NZ, and respond to questions. Each CRI board should have at least one eminent scientist to provide research leadership. The Taskforce thinks the Govt should look at appointing individuals as members of more than one CRI board concurrently, to help the various boards co-ordinate and find opportunities for collaboration.

The taskforce says many of its recommendations are "consistent" with the views held by the PM's chief science advisor Sir Peter Gluckman.