

Proposal to enhance access to published scientific research for NZ scientists

Summary

The costs of subscribing to scientific journals and databases, and the systems to provide access to these resources, are increasing beyond the capacity of many individual scientific institutions. By purchasing access and systems in consortia, New Zealand's Crown Research Institutes, science oriented government departments and commercial sci-tech companies are likely to be able to achieve better access to published scientific literature than is currently available to each organisation individually. All scientists in New Zealand could potentially access the same resources via a single web portal, creating a virtual national digital science library.

The situation for scientists in NZ

Scientists' access depends largely on the size of the institutions they work for. Large universities have good coverage; government departments and Crown Research Institutes less so. Those with least access are often those working for small sci-tech companies. These scientists are often looking to turn pure research into practical applications with the potential to benefit New Zealand society and the environment materially.

The situation in electronic publishing worldwide

Publishers bundle e-journals into broad packages which favour large institutions and broad -based consortia. Packages giving access to hundreds of journals ranging over a number of subjects can cost less than access to one title.

There is often considerable overlap between packages from different vendors.

Licence fees increase with the numbers of users however publishers can reduce their costs if they can negotiate with one large organisation rather than multiple small ones, leading to economies of scale

The situation in science libraries in NZ

Subscription budgets are often not keeping up with price increases

Considerable time is spent on complex licence negotiation with multiple vendors and trying to ensure subscription packages from different suppliers achieve coverage without overlap. A central buying agency could expertise in this area.

Infrastructure to support electronic access is costly and requires expertise which may be beyond small institutions to provide effectively.

Licences to electronic journals can preclude on-supply of copies to other institutions, preventing supply by interloan – the traditional method for libraries to make up the short falls in their collections. A single national purchasing body would avoid this problem.

Where supply of individual papers between institutional libraries is permitted, it is more costly in fees and staff time than direct access by scientists.

Scientists expect instant unmediated direct access to electronic resources.

Time saved by librarians on document supply and subscription management can be spent on assisting scientists with literature searching, current awareness, competitive intelligence and other value added services.

What other countries and sectors are doing

China, Brazil, India, Germany, Russia, Australia and Canada all support national digital science libraries – making scientific literature available to their entire science sector.

Universities in NZ and Australia and elsewhere purchase in consortia.

The EPIC consortia led by the National Library of NZ purchases electronic resources for schools and public libraries in NZ. EPIC has significantly enriched access for all at a cost which is affordable to individual member schools and public libraries.

Risks

Some organisations may view their investment in resources as a competitive advantage they are reluctant to surrender, or consider their current arrangements sufficient. The level of willingness to enter into joint purchasing arrangements will likely determine the viability of a consortium.

Next steps

If there is sufficient initial interest in the concept, a thorough investigation of costs, benefits and willingness to participate will be required to assess viability.