

Canadian research strategy set for lukewarm welcome?

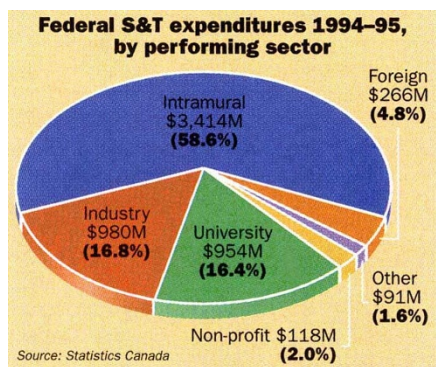
Washington. Plans by Canada's Liberal government to produce a national strategy for science and technology are running late amid allegations that the process, initiated in February 1994, is merely a cover for proposed cuts of up to 20 per cent in the federal science budget.

A draft strategy document prepared for John Manley, the industry minister, was rejected last month by an *ad hoc* cabinet committee, which considered its recommendations too weak to publish. Manley's staff are revising the document, which is now scheduled to be published in the autumn; but many feel that it is still unlikely to contain any radical proposals.

"The focus of the document will be on principles, such as the role of the government in fostering innovation," says one senior government official involved in the process. "It will be impossible for priorities to be set in, say, biotechnology, because so many different departments are involved."

This will disappoint many Canadian scientists, who are keen for the government to adopt a new strategy for science. Such a strategy is needed, they argue, not only to reverse the proposed budget cuts, but also to stem the continuous drain of scientific talent to the United States, and to restructure a system that is skewed against universities and in favour of government laboratories (see pie chart below).

Manley's review process began energetically enough, attracting thousands of scientists and others to a nationwide series of



meetings last autumn. But problems became apparent at the beginning of the year, when the schedule started to slip, and a document that was first promised in early 1995 — and then in June — is now due in October.

According to observers, three main factors have caused the slippage. The first, many claim, is a lack of political leadership from the top of government. Advocates of a radical change want a high-ranking science adviser appointed from outside the government, as well as much stronger cabinet involvement in science and technology. But

Jean Chrétien, the prime minister, has shown little interest in the review since it was announced.

Second, many blame the control exercised over the review process by civil servants at Manley's department, known as Industry Canada. The department, together with associated agencies, controls up to 40 per cent of the government's \$6-billion R&D budget, and its officials are widely considered to be opposed to reforms that could dilute their power.

The third factor is a split within the ruling Liberal party. This is divided over whether its policy for science and technology should be based on a degree of state planning or whether it should be determined by the pressures of the free market.

In April, Chrétien received a report from the National Advisory Board of Science and Technology — made up of leading scientists and industrialists — that called for a cabinet minister to be appointed as a 'champion' of science and technology, for a cabinet committee to deal with such issues and for the appointment of a 'chief science and technology advisor' to the federal government, with his or her own staff.

But the draft document put forward last month rejected the advisory board's proposals, saying that improvements in the running of federally funded science should come from the better management of existing structures. "The government has concluded that the principal issue is not the organizational form of its [science and technology] activities," said the report.

The draft suggested giving existing agencies and departments responsibility for drawing up benchmarks to measure their own success. These efforts would take place against a background of vaguely-worded principles, such as "promoting a stronger science culture" and "capturing the benefits of partnership" with industry.

This was apparently not good enough for the cabinet committee. Nor is it likely to satisfy Canadian scientists. But government officials say that the final document is unlikely to offer much more than the draft version on how science should be run, and the promised national strategy is likely to involve little more than new marching orders for the diffuse array of existing agencies and departments.

These are likely to be told to spend less money, and to do so in ways that boost Canada's economic performance. Action plans from individual departments outlining how these instructions will be met, as well as the final document itself, are now due for publication in early October.

Colin Macilwain

Protestors use World Wide Web in petition against nuclear tests

Tokyo. Using the power of the Internet, three graduate students at Tokyo University have devised a novel and powerful way to protest against French government plans to restart nuclear tests in the South Pacific.

Seishi Shimizu and Yuichi Nishihara, of the university's physics department, and Kiroh Harada, of its faculty of engineering, have set up a home page on the Worldwide Web on which protesters can register their names on a petition that will be delivered to the French Embassy in Tokyo on 4 August.

At the beginning of this week, over 36,000 names had been gathered from 89 countries. Furthermore, the goals and objectives of the petition, originally transmitted in Japanese and English, had been translated into about 20 different languages — including Indonesian, Catalan, Chinese, Dutch, Esperanto, Basque, Finnish, Greek, Polish, Portuguese, Swedish, and Turkish — by some of those who have signed up.

Two of the graduate students started an e-mail chain letter of protest on the Internet on 20 June. But their mailboxes were soon overloaded with thousands of responses arriving each day from around the world. Shimizu had to close down his mail box while Nishihara set up an automatic answering service advising people to switch to the home page. Shimizu says they are "overwhelmed" by the response and are "very sorry" about the problems they caused. But they say that all the e-mail responses have been safely stored, and will be added to the petition.

Shimizu says that the idea was born in response to the fact that the initial reaction of the Japanese public to the planned French nuclear tests has been "very cool". They decided to use the Internet as the "final weapon" to "lower the threshold for action" by individuals both within Japan and around the world.

Of the 36,889 names so far on the petition, 6,961 are from Japan, which is second only to Germany, with 9,983, and names from Japan are pouring in at the rate of about a thousand a day following an appearance of the students on a Japanese television talk show last week.

The Japanese government has already protested strongly to France about the proposed tests. In an unusual move, the Chief Cabinet Secretary, Chews Igarashi, summoned the French ambassador to ask the French government to reverse its decision to resume nuclear tests. ▶



Web protest: no French testing!