

Spacel satellite system

Communications Minister Marcel Masse has announced the start of a six-month field trial of Spacel, a Canadian-developed satellite communications system.

The trial is being conducted by the branch of the Department of Communications (DOC) responsible for provision of telecommunications networks and services for the federal government.

"The field trial will explore ways in which the federal government can use innovative satellite communications technology such as Spacel to provide extensive, cost-effective telecommunications services," said Mr. Masse. He added that Spacel is not only "a promising means to extend high-quality telephone services to underserved areas, but it can also be used to provide private voice and data network services for business".

Spacel was developed by Microtel Limited of Burnaby, British Columbia. It allows a person in a remote area to instantly receive a dial tone from the telephone network in an urban centre.

With Spacel, a portable earth terminal sends a signal to the 14/12 GHz *Anik C* satellite in geostationary orbit 36 000 kilometres over the equator. The satellite then relays the signal to a central control station, where the call is linked automatically with the national telephone system. The whole process takes only a fraction of a second.

The field trial will test delivery via Spacel of a variety of voice and data telecommunications services to government installations ranging from unmanned lighthouses and a remote weather-monitoring station to an air traffic control centre. Microtel is providing the Spacel terminals for the field trial.

The first segment of the field trial will connect four terminals in eastern Canada with a central control station at DOC's Communications Research Centre at Shirleys Bay, west of Ottawa. Terminals will be located at unmanned coast guard lighthouses in Point Petre and Nine-Mile Point, Ontario; the Transport Canada air traffic control centre in Riverview, New Brunswick; and DOC headquarters in Ottawa.

In the second part of the field trial, scheduled to begin this spring, a Spacel terminal will provide telephone service between government offices in Prince George and Vancouver, British Columbia.

Another terminal will transmit two-way voice and data communications from Environment Canada's Atmospheric Environment Service monitoring station in the Queen Charlotte Islands.

Agreement by trade ministers

Following the Federal-Provincial Trade Ministers' Conference in Vancouver, British Columbia on May 28, Minister for International Trade James Kelleher announced that the trade ministers from the provinces and territories agreed that there is "an urgent need for a comprehensive agreement to secure and expand our access to the US market".



James Kelleher

The ministers committed themselves to develop a closer federal-provincial consensus on trade and they agreed that diversification of markets is essential, particularly in Asia/Pacific.

Issues discussed by the ministers at the conference included: follow-up to the Quebec City Trade Declaration, including Canada/US trade relations and multilateral trade negotiations; a report by Mr. Kelleher on his consultations across the country on access to export markets and on export financing; an update on the national trade strategy; and establishing greater links in federal-provincial trade activities abroad.

PCB identification standards

The National Research Council (NRC) of Canada has developed the first international standard for the identification of individual compounds included in the toxic mixtures known as polychlorinated biphenyl (PCB). The synthesized PCB compounds for the new reference materials were developed and purified by Wellington Environmental Consultants Inc. of Guelph, Ontario.

The NRC's chemical reference package, known as *CLB-1*, is the first to be offered for sale with technical support from an agency concerned mainly with quality assurance, said Dr. W. David Jamieson, head of analytical chemistry at NRC's Atlantic Research Laboratory in Halifax. The package consists of four solutions containing individually synthesized, purified chlorinated biphenyls. These include 51 of the more toxic compounds of PCB and those most likely to be found in the environment. There are 209 possible PCB compounds, all closely related.

The new *CLB-1* reference materials will be used to identify specific PCB compounds by laboratories employing gas chromatography or mass spectrometry equipment.

Reliable reference materials are needed

to accurately identify and measure the concentrations of individual PCB compounds since the toxic and cancer-causing properties of PCBs vary with the type of PCB compound, said Dr. Jamieson.

Until now, government agencies and private companies specializing in chemical analysis usually have had to rely on a variety of commercial sources for laboratory PCB reference. The accuracy of those materials has not been assured by an independent authority.

PCBs were manufactured for half a century before being banned in Canada in 1977 in response to growing evidence that they are toxic and carcinogenic. They have been used as a coolant and dielectric in electrical transformers, in office supplies and in plastics. The resistance to chemical and biological breakdown which made them popular now has become the prime obstacle in the handling and disposal of PCBs.

Human resource development in Third World

Minister for International Relations Monique Vézina recently announced that Canada will contribute \$875 000 over the next three years to the Foundation for International Training (FIT), an international non-governmental organization (NGO) focusing on human resource development in Third World countries.



Monique Vézina

The program contribution will be administered by the Canadian International Development Agency (CIDA) for projects which this year range from holding a seminar in China to train government cadres and enterprise managers in negotiating joint ventures, to training instructors and preparing training materials for the Foundation for Entrepreneurial Development in the Dominican Republic.

Incorporated in Toronto nine years ago, FIT works in both the private and the public sectors, running training sessions for managers and administrators, designing curricula and training manuals, sponsoring personnel exchanges, and building links between Third World NGOs. FIT works to upgrade specific skills that already exist within Third World institutions and organizations.

By the end of March 1984, some 200 projects had been completed in over 40 countries. CIDA has provided a total of almost \$6.4 million to FIT since 1977.