

encouraged small- to medium-sized electronic firms to penetrate world and domestic markets. In October 1983 construction was started on an office communications systems research centre in Laval, Que., an affiliate of the communications research centre near Ottawa.

**Spectrum management and regulation.** DOC maintains control over radiocommunications by licensing. Radio stations (other than those used in broadcasting undertakings) using any form of Hertzian wave transmission, including television and radar, must be licensed by the department unless exempted by regulation. General radio regulations provide for six classes of radio stations: land, mobile, coast, earth, amateur and space. Various categories of licences in each class include public commercial, private commercial and experimental for land stations.

The telecommunications regulatory service in Ottawa is responsible for regulatory policies and regulations. Licensing, inspection and enforcement activities are carried out by DOC regional offices — Atlantic, Quebec, Ontario, Central and Pacific — and 44 district offices.

DOC installed a computer-based spectrum management system for land mobile services in 17 of its field offices, to enable more efficient use of the radio frequency spectrum, especially in urban areas where spectrum congestion is high.

**Government Telecommunications Agency.** This agency co-ordinates telecommunications services for federal departments, giving advice on the application of new technologies. Through the agency, DOC provides shared telecommunications services, leasing services from telecommunications carriers and allocating costs to departments.

#### 14.5.2 Canadian Radio-television and

##### Telecommunications Commission (CRTC)

This commission regulates telecommunications carriers incorporated under federal legislation, and all broadcasting activities in Canada. It came into existence when the federal Broadcasting Act of 1968 was proclaimed. Then known as the Canadian Radio-Television Commission, it was responsible for regulating broadcasting in Canada, including cable television, except in purely technical aspects.

**Telecommunications regulation.** In the early 1970s, there was a growing recognition that the new information technologies were bringing about a sharp convergence of telecommunications and broadcasting. Under the Canadian Radio-television and Telecommunications Commission Act in 1976, the CRTC was renamed and was given regulatory power over certain telecommunications carriers. Previously the Canadian Transport Commission had this power.

Telephone and telegraph companies incorporated under federal legislation are subject to CRTC juris-

dition. These include Telesat Canada, Bell Canada, the British Columbia Telephone Co., CNCP Telecommunications, Northwest Telecommunications and Terre Nova Telecommunications. The remaining carriers, provincially incorporated or owned, fall under provincial jurisdiction. International telegraph and telephone communications are subject to an international telecommunications convention and its regulations or regional agreements. Overseas cables landed in Canada are subject to external submarine regulations under the Telegraphs Act.

Under the Railway Act, the CRTC must ensure that all tolls, including rates or charges for telecommunications services, are just and reasonable. Among other matters, the act gives the commission jurisdiction over interconnections between telecommunications carriers. CRTC rules of procedure for regulation of telecommunications carriers came into effect in August 1979.

**Broadcast regulation.** Canadian law regards publicly-owned broadcasting, commercially based radio and TV and cable television as a single system. This wording comes from the 1968 Broadcasting Act which provides the authority under which the CRTC regulates the Canadian broadcasting system.

The CRTC issues a broadcasting licence when the applicant has satisfied the technical requirements of the Radio Act and regulations. The CRTC regulates and supervises the broadcasting system, to implement certain policy objectives: effective Canadian ownership and control of broadcasting facilities, program variety to provide a balanced expression of views on matters of public concern, availability of service in English and French, and programming of a high standard, using predominantly Canadian creative and other resources.

Under CRTC regulations for AM radio broadcasting, 30% of the musical compositions presented by stations and networks between 6:00 a.m. and midnight are to be Canadian. Individual FM radio station or network operator commitments as to Canadian content are conditions of licence.

Under television regulations, broadcast time devoted to non-Canadian programming is not to exceed 40% between 6:00 a.m. and midnight. The CRTC *Special Report on Broadcasting in Canada, 1968-1978*, showed that the average Canadian watching English-language TV devoted 68% of viewing time to foreign-produced programs. The CRTC called for proposals to review the quantitative requirements. Almost 200 submissions were received by March 1981, and the CRTC held informal public meetings across Canada to hear the views of individual Canadians.

The CRTC had concluded earlier that the capability of cable television technology to enlarge the coverage areas of US stations and networks in Canada threatened Canadian broadcasting.