

Subsection 6.—Federal Government Civil Telecommunications and Electronics Services

Radio in Canada traces its origin to the year 1900 when wireless telegraphy was introduced and placed under the jurisdiction of the Department of Public Works. The first commercial radio circuit was established between Chateau Bay, Que., and Belle Isle in the Strait of Belle Isle in 1901, replacing an underwater cable which was difficult to maintain. In the first days of radio there did not appear to be any necessity for special legislative control, but the growth of this new medium of communication was very rapid and the Wireless Telegraph Act of 1905 became the first legislation in Canada controlling radio communication.

Radio regulation and radio coast station services are now under the jurisdiction of the Telecommunications and Electronics Branch of the Department of Transport. The functions and responsibilities of the Branch may be summarized as follows: (1) administration of the Radio Act and Regulations and the Radio Provisions of the Canada Shipping Act and Ship Station Radio Regulations; (2) research into and development of new and improved communication and electronic equipment and systems needed for aeronautical, marine, meteorological and other services; (3) construction, maintenance and operation of radio aids to marine and air navigation and of radio communication stations including procurement of the necessary equipment; (4) development and administration of government policy with respect to the Canadian Overseas Telecommunication Corporation and Canada's participation on the Commonwealth Telecommunications Board; (5) administration of the leasing of landline services required for all services of the Department; (6) planning of emergency measures and administration of the Emergency National Telecommunication Organization (ENTO); (7) administration of the Telegraphs Act and the Regulations thereunder covering the licensing of overseas submarine cables; (8) participation in the work of the International Telecommunication Union and its subsidiary organs; and (9) participation in the communication and electronic activities of the International Civil Aviation Organization (ICAO), the International Air Transport Association (IATA) and the International Marine Consultative Committee (IMCC).

Licensing and Regulation of Radio Stations.—The Radio Act requires that all radio stations be licensed by the Department of Transport including television, radar and any form of Hertzian wave transmission. Licensing, which provides basic control over the right to establish a radio station, involves the assignment of specific frequencies to each station with a view to avoiding direct interference between stations. The setting of standards for the equipment, installation and operation of a station provides control for efficient use of the radio spectrum. Control over station operation is exercised through examination and certification of operating personnel.

The standard broadcast band is crowded with stations that are capable of interfering with one another over the entire North American region. Engineering briefs covering the selection or change of frequency, amount of power and design of the directional antennae system must be approved by the Department of Transport and notification sent to the signatory countries of the North American Regional Broadcasting Agreement before a new broadcasting station can be licensed or before modification can be made in an existing station. After the establishment or change is completed, proof of performance must be submitted to establish that the actual installation is in accordance with the approved plan.

Ten monitoring stations are maintained at suitable points across Canada to make frequency measurements and record transmissions to ensure that radio stations are complying with the procedures set forth for their particular service, to detect non-licensed stations, to assist in the investigation of inter-station interference and to make studies of spectrum utilization.