



[www.ic.gc.ca/antenna](http://www.ic.gc.ca/antenna)

# Antenna Towers in Your Community



Every day, millions of Canadians connect via radiocommunication. Radiocommunication links the country by providing us with TV and radio broadcasting, cable TV, cellphone networks, two-way radios and other radiocommunication services.

Radiocommunication would not work without antennas, which, to function effectively, are often supported by towers or other tall structures. The Canadian public, businesses, police, firefighters, ambulances, air navigation systems and national defence use antenna systems, including towers, to ensure reliable radiocommunication.

## Role of Industry Canada

Industry Canada is responsible for regulating radiocommunication in Canada and for authorizing radiocommunication facilities. We believe that dialogue between parties is essential for the orderly introduction of radiocommunication services into a community.

Industry Canada has developed this pamphlet to address commonly asked questions regarding the installation of radiocommunication antenna towers and related facilities. This pamphlet provides information on:

- the installation of new antenna-supporting structures, or the modification of existing ones
- land-use authority and public consultation
- aeronautical safety
- radio frequency field emissions
- the *Canadian Environmental Assessment Act*

## Frequently Asked Questions

### 1 How will I know if a new antenna tower is being proposed for installation in my neighbourhood, and how can I share my views?

Anyone planning to install an antenna tower must follow the procedures of local land-use authorities, which may include a requirement to notify local residents. If a land-use authority does not have any procedures in place, then Industry Canada's procedures must be followed. This can include written notification to residents and groups within a radius of three times the height of the proposed structure.

Citizens having questions or comments about proposed antenna towers can make their views known through the consultation process. More information on procedures can be found on Industry Canada's website at [www.ic.gc.ca/antenna](http://www.ic.gc.ca/antenna).

### 2 Why does the antenna tower have to be in my neighbourhood?

The location of antenna towers is important in providing the quality of service that the public expects. Radio waves are limited in how far they can travel while still being reliable. Demand for wireless services is increasing rapidly; to meet this demand, more towers are required, often closer to users.

### 3 Can existing towers, or other antenna-supporting structures, be used?

Industry Canada requires antenna tower proponents to use existing structures. In some instances, because of technical or other constraints, sharing a structure is not always feasible.

### 4 Who regulates antenna towers?

Industry Canada is responsible for managing the use of the radio frequency spectrum, including antenna towers.

### 5 Are there any safety guidelines to protect the public's health?

Health Canada has safety guidelines for exposure to radio frequency fields in its Safety Code 6 publication entitled *Limits of Human Exposure to Radiofrequency Electromagnetic Fields in the Frequency Range from 3 kHz to 300 GHz*.<sup>1</sup> While the responsibility for developing Safety Code 6 rests with Health Canada, Industry Canada has adopted this guideline for the purpose of protecting the general public.

Industry Canada requires all radiocommunication and broadcasting operators to comply with Safety Code 6 at all times, including the consideration of combined effects of nearby installations within the local radio environment. Further, operators must respect updates made to Safety Code 6.

### 6 Why must the tower be painted and have lights?

Paint and lights ensure that the tower is visible to aircraft. Proponents must ensure their proposals for any antenna system are first reviewed by Transport Canada. Transport Canada will advise the proponent of any potential hazard to air navigation and the standards relating to painting and lighting for the antenna tower. Tower marking options may be available and, where concern exists, these options should be discussed with the proponent.

### 7 Are environmental concerns taken into consideration?

Yes. Installation and modification of antenna systems must comply with the *Canadian Environmental Assessment Act*.

### 8 Are local zoning bylaws taken into consideration?

Yes. Industry Canada requires antenna tower proponents to consult with local land-use authorities in order to work toward solutions that consider each other's interests.

### 9 How can I find more information?

The process for all antenna systems in Canada is outlined in Industry Canada's Client Procedures Circular (CPC) 2-0-03 entitled *Radiocommunication and Broadcasting Antenna Systems*.

More information is available on Industry Canada's Spectrum Management and Telecommunications website at [www.ic.gc.ca/antenna](http://www.ic.gc.ca/antenna), including CPC-2-0-03.

Industry Canada has local representation throughout Canada. To find the office nearest you, please consult Radiocommunication Information Circular (RIC) 66 entitled *Addresses and Telephone Numbers of Regional and District Offices*, which can also be found at the above website.