



## 1. Policy Statement

The Protocol and Guidelines for Establishing Radiocommunication Facilities are to be read in their entirety as a comprehensive and integrated policy framework when establishing or developing relevant facilities within the Municipality of Trent Lakes.

## 2. Purpose

The objectives of this Protocol are to:

- a) Minimize the number of new radiocommunication facilities in the Municipality while providing excellent coverage;
- b) Encourage the location and siting of new radiocommunication facilities in a manner which minimizes their visual impact and respects sensitive uses and natural heritage and cultural heritage features;
- c) Encourage co-location on an existing radiocommunication facility;
- d) Ensure compatibility with surrounding uses;
- e) Establish development and design guidelines for evaluating proposals;
- f) Establish a consultation process.

## 3. Definitions

**“Antenna”** means a device designed for the purpose of the reception and/or transmission of radiocommunication but does not include a tower or other supporting structure, or an equipment shelter.

**“Radiocommunication facility”** means an exterior transmitting device, or group of devices, used to receive and/or to transmit radio-frequency signals, microwave signals, or other federally-licensed or license- exempt communications energy transmitted from, or to be received by, other antennas. Radiocommunication facilities include the antenna, and if required, its supporting tower, mast or other supporting structure, and an equipment shelter. This Protocol may refer to the following two types of radiocommunication facilities:

1. Freestanding: a structure (e.g. tower or mast) built from the ground for the expressed purpose of hosting a radiocommunication facility;
2. Building/Structure-mounted: a radiocommunication facility mounted on an existing structure, which could include a building wall or rooftop, a light standard, utility pole or other.

**“Co-location”** means the placement of antennas and equipment operated by one or more proponents on an antenna system operated by a different proponent, thereby creating a shared facility.

**“Council”** means the Council of the Municipality of Trent Lakes.

**“Director”** means the Municipality’s Director of Building and Planning, the Director’s designate, or, in the event of organizational changes, the Director of the successor division or department responsible for the administration of this Protocol.

**“Downtown area”** means the area identified as the Buckhorn Community Improvement Plan Area.

**“Equipment shelter”** means a structure used to house the required equipment for the operation of the antenna system.

**“Fees and Charges By-law”** means a By-Law To Establish Fees And Charges To Be Collected By The Corporation Of The Municipality of Trent Lakes.

**“Height”** means the distance measured from the lowest ground level at the base, including the foundation, to the tallest point of the antenna system. Depending on the particular installation, the tallest point may be an antenna, lightning rod, aviation obstruction lighting or some other appurtenance. Any attempt to artificially reduce the height (addition of soil, aggregate, etc.) will not be included in the calculation or measurement of the height of the antenna system.

**“Municipality”** means the Corporation of the Municipality of Trent Lakes.

**“Other agencies”** means bodies (e.g., boards or commissions) that administer public services but are not operated or staffed by the Municipality. These include, but are not limited to, KRCA, Peterborough Public Health and Parks Canada.

**“Proponent”** means a company, organization or person proposing to site an antenna system (including contractors undertaking work for telecommunications carriers) for the purpose of providing commercial or private telecommunications services.

**“Sensitive use”** means a building, amenity area or outdoor space where routine or normal activities occurring at reasonably expected times may be hurt, disturbed, or offended by external forces. Sensitive uses may be a part of the natural or built environment and may include, but are not limited to residences, day care centres, and educational and health facilities.

**“Tower”** means all types of towers including but not limited to a monopole, tripole, lattice tower, guyed tower, self-supported tower, pole, mast, or other structure, which are used to support one or more antennas and may be located at ground level or attached to a building or structure.

## **4. Jurisdiction and Roles**

### **4.1 Federal Jurisdiction**

The Government of Canada regulates radiocommunication facility siting decisions, settles disputes, and sets health and safety standards. Radiocommunication facilities are regulated federally under the *Radiocommunication Act* and are therefore exempt from provincial legislation such as the *Planning Act*, as well as municipal official plans and zoning by-laws. The authority for approving a radiocommunication facility rests with the federal agency of Innovation, Science and Economic Development Canada (ISED).

### **4.2 Role of the Municipality**

The role of the Municipality is to communicate to proponents the sensitivities, planning priorities, and other relevant characteristics specific to the Municipality. The Municipality will participate in the siting process by providing the design guidelines set out in this Protocol. The Municipality will also contribute to the application review process by assisting with public consultation. A formal letter of concurrence or, in instances where an application is considered unsupportable, a letter of non-concurrence on a proposal will be provided by the Municipality.

For the purposes of this Protocol, the designated official for the Municipality having the authority to administer this Protocol is the Director. All correspondence and materials submitted as part of this municipal consultation process must be directed to the Director.

### **4.3 Role of the Proponent**

The proponent must adhere to ISED and Health Canada guidelines and regulations while having regard for the development guidelines and municipal review process outlined in this Protocol.

The proponent must:

- a) Investigate sharing or using existing infrastructure before proposing a new radiocommunication facility;
- b) Contact the Municipality to schedule a pre-consultation meeting as outlined in this Protocol;
- c) Submit a complete application and undertake the Municipality's review process outlined in this Protocol; and
- d) Undertake public consultation and address relevant concerns as required and appropriate.

## **5. Exclusions**

### **5.1 Excluded Structures**

The following types of radiocommunication facility installations or modifications are excluded by ISED from municipal and public consultation requirements:

- a) New radiocommunication facilities where the height is less than 15 metres aboveground level. This exclusion does not apply to radiocommunication facilities proposed by telecommunication carriers, broadcasting undertakings or third-party tower owners;
- b) Existing radiocommunication facilities where modifications are made, antennas added or the tower replaced (similar to the original design and location), including to facilitate sharing, provided that the total cumulative height increase is no greater than 25% of the height of the initial radiocommunication facility installation. No increase in height may occur within one year of completion of the initial construction. This exclusion does not apply to radiocommunication facilities using purpose-built antenna supporting structures with a height of less than 15 metres above ground level operated by telecommunications carriers, broadcasting undertakings or third-party tower owners;
- c) Non-tower structure: antennas on buildings, water towers, lamp posts, etc. may be excluded from consultation provided that the height above ground of the non-tower structure, exclusive of appurtenances, is not increased by more than 25%;
- d) Temporary radiocommunication facilities used for special events or emergency operations and must be removed within three months after the start of the emergency or special event; and
- e) Maintenance of an existing radiocommunication facility.

Individual circumstances vary with each radiocommunication facility installation and modification, and the exclusion criteria above should be applied in consideration of local circumstances. Consequently, it may be prudent for the proponent to consult with the Municipality even if the proposal meets an exclusion criterion. When applying the criteria for exclusion, the following should be considered:

- the radiocommunication facility's physical dimensions, including the antenna, mast, and tower, compared to the local surroundings;
- the location of the proposed radiocommunication facility on the property and its proximity to neighbouring residents;
- the likelihood of an area being a sensitive location; and
- Transport Canada marking and lighting requirements for the proposed structure.

## **5.2 Confirmation of Exclusion**

Proponents who are not certain if their proposals are excluded, or whether consultation may still be prudent, are advised to contact the Municipality and/or ISED for guidance.

## **6. Location and Design Guidelines**

To minimize the impact of radiocommunication facilities on sensitive uses, location and

design guidelines have been established in this Protocol. While it is recognized that radiocommunication facilities need to be strategically located to satisfy specific technical criteria and operational requirements, proponents are encouraged to work with the Municipality to address environmental, natural heritage, cultural heritage and land use compatibility concerns.

### **6.1 Use of Existing Infrastructure**

Proponents are required, by ISED and the Municipality, to first consider using existing towers or other infrastructure (i.e. rooftops, utility poles, etc.). Co-location on an existing radiocommunication facility is the preferred option to minimize the proliferation of radiocommunication facilities.

### **6.2 Preferred Locations**

Where co-location on an existing radiocommunication facility or tower is not possible, new radiocommunication facilities are preferred in the following locations:

- a) Areas that maximize the distance from sensitive uses;
- b) Areas that maximize the distance from active park space; or
- c) Sites that are within industrial or commercial areas, utility corridors, or non-residential areas considered appropriate by the Municipality.

### **6.3 Discouraged Locations**

The Municipality discourages the installation of new radiocommunication facilities in the following locations:

- a) Within lands designated Hamlet Residential in the Municipality's Official Plan and in close proximity to other sensitive uses;
- b) Within lands designated Environmental Protection Area in the Municipality's Official Plan;
- c) Within a floodplain;
- d) Within open space areas used as active park space;
- e) Within a Heritage Conservation District or on a heritage listed or designated property under the authority of Part IV or Part V of the *Ontario Heritage Act*. If for technical reasons the radiocommunication facility must be located within the Heritage Conservation District or on a heritage listed or designated property under the authority of Part IV or Part V of the *Ontario Heritage Act*, steps must be taken to minimize the radiocommunication facility's visual impact;
- f) Within the Community Improvement Plan Area (unless located on the roof of a building greater than 8 storeys);

### **6.4 Development and Design Preferences**

Where a new radiocommunication facility must be constructed, proponents are encouraged to use the following development and design preference guidelines:

- a) A new radiocommunication facility should be designed with co-location capacity;
- b) On undeveloped sites, the new radiocommunication facility should be located so as not to preclude future development opportunities for the site;
- c) Radiocommunication facilities and equipment shelters should be located away from the street/road line to minimize visual impacts from the streetscape;
- d) Radiocommunication facilities should be sited to avoid obscuring significant views or vistas;
- e) Radiocommunication facilities must be sited to preserve as much existing vegetation as possible;
- f) Suitable access to a radiocommunication facility must be provided from a public street/road or across a private right-of-way;
- g) A radiocommunication facility must be designed and constructed in a way so that drainage from the site does not adversely affect neighbouring properties or existing stormwater management;
- h) Radiocommunication facilities and equipment shelters should be attractively designed or screened and concealed from ground level or other public views to mitigate visual impacts. Screening could include using landscaped treatment, decorative fencing, etc.;
- i) Monopole towers with antennas shrouded or flush mounted are preferred;
- j) Stealth techniques, such as flagpoles, trees, light poles, etc., should be considered and used where appropriate to minimize visual impact within the context of the surrounding area;
- k) Radiocommunication facilities that are attached or adjacent to existing buildings, including rooftop installations, should be screened and designed to complement the architecture of the building with respect to form, material and colour;
- l) Unless otherwise required by Transport Canada, radiocommunication facilities should have non-reflective surfaces and be painted with neutral colours that blend with the surrounding landscape;
- m) Radiocommunication facilities should not be illuminated unless required by Transport Canada;
- n) Although radiocommunication facilities and equipment shelters are not subject to the Municipality's zoning by-laws, their installation must ensure that they do not create a non-compliance of any Municipality by-law for other uses or functions on the site;
- o) No third-party advertising or promotion of the owner/operator is permitted on a radiocommunication facility; and

- p) At the base of the structure, a small sign with a maximum size of 0.5 square metres is to be provided identifying the owner/operator and their contact information.

## **6.5 Siting On Municipally-Owned Property**

Any request to install a radiocommunication facility on lands owned by the Municipality must be made to the CAO/Treasurer and approved by Council. A radiocommunication facility on lands owned by the Municipality is subject to the procedures and guidelines outlined in this Protocol.

## **7. Pre-consultation**

Pre-consultation is one of the most important elements in the radiocommunication facility siting process and should occur prior to the proponent committing to a site or design. Unless otherwise excluded in Section 5 of this Protocol, proponents must initiate pre-consultation with the Municipality prior to submitting a formal application as early as possible in the radiocommunication facility siting process. As the proposals are not for *Planning Act* application purposes, pre-consultation can occur outside of the Municipality's standard pre-consultation process. Pre-consultation requests are to be sent via email to [development@trentlakes.ca](mailto:development@trentlakes.ca).

### **7.1 Pre-consultation Requirements**

The proponent will provide the following information at the pre-consultation stage:

- a) The proposed location(s) of the proposed radiocommunication facility;
- b) The type and height of the proposed radiocommunication facility;
- c) Preliminary scaled drawings and/or visual renderings of the proposed radiocommunication facility; and
- d) Documentation regarding the investigation of co-location potentials on existing or proposed radiocommunication facility within 500 metres or 2 KM of the subject site, as determined in consultation with Municipal Staff.

### **7.2 Confirmation of the Municipality's Preferences and Requirements**

The pre-consultation process will:

- a) Identify preliminary issues of concern by the Municipality;
- b) Determine whether the radiocommunication facility is excluded in accordance with Section 5;
- c) Identify requirements for public consultation;
- d) Identify the submission requirements to ensure that a complete application is submitted;
- e) Identify any Municipal departments or other agencies to be consulted; and

- f) Identify any permits or approvals that may be required.

## **8. Application Requirements and Review Process**

### **8.1 Complete Application Requirements**

When a proposed radiocommunication facility does not meet the exclusion criteria identified in Section 5 of this Protocol, the proponent must submit a complete application to the Municipality for review. All information is to be uploaded electronically.

To be deemed complete, the proponent must include the following information when submitting an application:

- a) Applicable fees as per the Municipality's Fees and Charges By-Law;
- b) A Site Selection Justification Report prepared by a qualified professional. The report should identify:
  - the proposed site location and the surrounding context, including a map showing the nearest residential uses;
  - the purpose and need for the proposed radiocommunication facility;
  - the rationale for the site selected;
  - the distance from the proposed radiocommunication facility to the nearest sensitive use;
  - coverage and capacity of existing radiocommunication facilities in the general area;
  - a summary of opportunities for co-location potentials on existing or proposed radiocommunication facility within 500 metres of the subject site; and
  - detailed evidence as to why co-location on an existing radiocommunication facility is not a viable alternative.
- c) A site plan, in a metric scale, showing the proposed radiocommunication facility situated on the site. The plan must show the dimensions of the subject lands; the lease area; size and type of all existing and proposed buildings or structures; height of the proposed radiocommunication facility; access to the site and proposed radiocommunication facility; parking; natural areas; easements; setbacks to the property lines required by the zoning by-law applicable to the property; proposed landscaping and/or fencing; etc.;
- d) Elevations showing the structure type, colours, height and materials of the proposed radiocommunication facility, equipment shelters, screening, or other structural elements;
- e) Colour photographs showing the current site conditions;
- f) Visual renderings or photo simulations of the proposed radiocommunication facility

superimposed to scale and illustrating views in all directions (north, south, east and west);

- g) Confirmation of legal ownership of the lands subject to the proposal, or authorization from the registered property owner of the land, their agent, or other person(s) having legal or equitable interest in the land;
- h) Certification from a qualified professional that all lighting features, other than those required by Transport Canada, have been designed using only fixtures that meet full cut-off classification and result in minimal spillage onto adjoining properties; and
- i) Any other technical reports, background information or other supporting documentation as identified by the Municipality at the pre-consultation stage.

## **8.2 Review Process Timeframe**

Consultation with the Municipality and the public is expected to be completed within 120 days, commencing once the required fees and a complete application has been received to the satisfaction of the Municipality.

A determination on the completeness of an application or request for additional information will be provided by the Municipality within 15 business days of receipt of the proposal. If the application submission is deemed incomplete, the Municipality will notify the proponent of the outstanding items.

If a request is made to the proponent for additional information prior to the Municipality deeming the application complete and no additional information is supplied within 90 days of the request, the Municipality will advise ISED of the incomplete nature of the application and will deem the application abandoned.

Upon receipt of a complete application submission, Municipal staff will circulate the application for review and comment to applicable departments, and other agencies as appropriate.

Through the circulation of the application to the applicable Municipal departments and other agencies, municipal staff will review the submitted proposal and prepare comments for the proponent. The proponent will be responsible for addressing any concerns identified during the technical review of the application and through public consultation, to the satisfaction of the Municipality.

The Municipality or the proponent may request an extension to the review process timeline. This extension must be mutually agreed on by both parties. In the event that the review process is not completed in 270 days, the proponent may be required to carry out supplementary public consultation, if requested by the Director.

## **8.3 Public Consultation and Notification**

Both the Municipality and ISED require nearby property owners to be consulted regarding non-excluded radiocommunication facility proposals. Consultation allows the community to be involved and stakeholders to work towards a consensus.

Once the Municipality has deemed the application submission to be complete, the proponent will initiate the following public consultation process:

a) Distribute public notice of the proposal to:

- all property owners within a radius of the greater of 120 metres or three times the tower height measured from the furthest point of the radiocommunication facility;
- any adjacent municipality within the distance prescribed above; and
- ISED.

b) The public notice of the proposal will be sent by regular mail by the proponent and include:

- Information on the location, height and dimensions, type, design and colour of the proposed radiocommunication facility including simulated images of the proposal, as well as a 21 cm x 28 cm (8½" x 11") size copy of the site plan submitted with the application;
- The proposed radiocommunication facility's purpose, the reasons why existing radiocommunication facilities or other infrastructure cannot be used, a list of structures that were considered unsuitable and future sharing possibilities for the proposal;
- Identification of areas accessible to the general public and the access/ demarcation measures to control public access;
- Information on the environmental status of the project, including any requirements under the *Impact Assessment Act*;
- Information on Transport Canada's aeronautical obstruction marking / lighting requirements if available, or, if not available, expectations regarding Transport Canada's requirements and an undertaking to provide them once they become available;
- The name and contact information of a contact person for the proponent;
- The name and contact information of the Planner at the Municipality assigned to the application;
- The contact information for the local ISED office;
- An attestation by the proponent that the radiocommunication facility will comply with Health Canada's Safety Code 6 which sets limits for safe human exposure to radiofrequency electromagnetic energy;
- An attestation that the installation will respect good engineering practices including structural adequacy;
- Information on how to submit written public comments;
- A deadline date for receipt of public responses to the proposal, which will be 30 days after the notice is mailed for written public comment;

- Information where further information can be viewed;
- The following statement:

“Radiocommunication facilities are regulated federally under the *Radiocommunication Act*. The authority for approving a radiocommunication facility rests with the federal agency of Innovation, Science and Economic Development Canada (ISED). ISED requires [insert name of proponent] to review this proposal with the local municipality. After reviewing this proposal, the Municipality of Trent Lakes will provide its position to ISED and to the [insert name of proponent].”

- c) The notification is to be sent out with the following statement clearly show in bold type on the face of the envelope:

“Important Notice Regarding a Proposed Radiocommunication Facility in Your Neighbourhood”.

- d) The proponent will also post notice in the form of an advertisement in a local newspaper and identify the date of the Public Meeting, at a scheduled Municipal Council Meeting, following the 30-day public consultation period.
- e) At any time, the Director, may identify the need to broaden the public circulation and content of the public notice requirements and/or require a Public Meeting.

#### **8.4 Public Meeting**

Where a Public Meeting is required by the Director, the proponent will provide a written notice of the Public Meeting at least 20 days in advance of the meeting. The notice referred to in Section 8.3 may be given together with the notice of a Public Meeting. In addition to the public notice requirements of Section 8.3, the notice of a Public Meeting must include the date, time and location of the meeting.

The proponent will be responsible for providing notification of the Public Meeting.

At the Public Meeting, the proponent must, in addition to addressing all reasonable and relevant concerns raised by the public, present the following information:

- a) An explanation that ISED is the approval authority for radiocommunication facilities, ISED’s requirements for consultation with the public and the Municipality’s role as a commenting body within ISED’s approval process, and the purpose of the Public Meeting;
- b) An explanation of the purpose of the radiocommunication facility, the need for the selected location and height, its future sharing possibilities and what other structures were considered and reasons why existing radiocommunication facilities or other infrastructure cannot be used;
- c) Information on the location, height and dimensions, type, design and colour of the proposed radiocommunication facility including simulated images or photo renderings of the proposal on the site;

- d) A map showing the radiocommunication facility's location within the community;
- e) If applicable, an explanation of the expected Transport Canada lighting and marking requirements for the proposal;
- f) A statement that the proponent will respond to reasonable and relevant concerns raised by the public;
- g) An explanation of what ISED under CPC-2-0-03 (see Appendix B) classifies as a reasonable and relevant concern; and
- h) The deadline for bringing reasonable and relevant concerns to the proponent after the Public Meeting.

### **8.5 Public Comments**

Upon receipt of comments from the public, the proponent will:

- a) Respond to the party in writing within 14 days acknowledging receipt of the question, comment or concern;
- b) Address in writing all reasonable and relevant concerns within 60 days of receipt or explain why the question, comment or concern is not, in the view of the proponent, reasonable or relevant;
- c) In the written communication referred to in the preceding point, clearly indicate that the party has 21 days from the date of the correspondence to reply to the proponent's response;
- d) Keep a record of all correspondence that occurred during the consultation process, including records of any agreements that may have been reached and/or any concerns that remain outstanding; and
- e) Provide a copy of all written correspondence to the Municipality and ISED.

## **9. Statement of Concurrence or Non-Concurrence**

The Municipality will issue a Letter of Concurrence or a Letter of Non-Concurrence upon the completion of the Municipality's review and public consultation processes.

### **9.1 Concurrence**

A Letter of Concurrence will be issued to the proponent, with a copy to ISED, where the proposed radiocommunication facility has satisfactorily addressed the requirements as set out within this Protocol and has been recommended for approval by the Director. The Letter of Concurrence may include consideration of land use compatibility, responses from any affected property owners, the proponent's adherence to the Protocol and any conditions of concurrence.

### **9.2 Non-Concurrence**

The delegation of authority provided to the Director is restricted to approvals only. Should the proposal not conform to the Municipality's requirements, as set out within

this Protocol, or should the Director not recommend a proposed radiocommunication facility for approval, the power to make any determination other than approval rests with Council. Council is also able to approve a proposed radiocommunication facility.

Following a Council decision to not support a proposed radiocommunication facility, the Municipality will provide a Letter of Non-Concurrence to the proponent, with a copy to ISED. The Municipality will forward to the proponent and ISED any comments on outstanding issues, including those raised during the public consultation process.

### **9.3 Rescinding a Concurrence**

The Municipality may rescind its concurrence if following the issuance of a concurrence, it is determined by the Municipality that the application contained a misrepresentation or a failure to disclose all the pertinent information regarding the proposal, or the plans and conditions upon which the concurrence was issued in writing have not been complied with, and a resolution cannot be reached to correct the issue.

In such cases, the Municipality will provide notification in writing to the proponent and to ISED and will include the reason(s) for the rescinding of its concurrence.

### **9.4 Duration of Concurrence**

A concurrence remains in effect for a maximum period of three years from the date it was issued by the Municipality. If construction has not commenced within this time period, the concurrence expires and a new submission and review process, including public consultation, is necessary prior to any construction occurring.

In addition, if construction has not commenced after two years from the date the concurrence was issued, the Municipality requests that the proponent send a written notification of an intent to construct to the Director once the work to erect the structure is about to start. This notification should be sent 60 days prior to any construction commencing. No further consultation or notification by the proponent is required.

### **9.5 Transfer of Concurrence**

Once concurrence has been issued, that concurrence may be transferred from the original proponent to another proponent without the need for further consultation provided that:

- a) All information gathered by the original proponent in support of obtaining the concurrence from the Municipality is transferred to the current proponent;
- b) The structure for which concurrence was issued to the original proponent is what the current proponent builds; and
- c) Construction of the structure is commenced within the duration of concurrence period.

## **10. Redundant Radiocommunication Facility**

The Municipality can issue a request to network operators to clarify if a specific radiocommunication facility is still required to support communication network activity. The network operator will respond within 30 days of receiving the request and will

provide any available information on the future status or planned decommissioning of the radiocommunication facility.

Where the network operators concur that a radiocommunication facility is redundant, the network operator and the Municipality will mutually agree on a timeframe to remove the system and all associated buildings and equipment from the site. Removal will occur no later than 2 years from when the radiocommunication facility was deemed redundant.

**11. Dispute Resolution**

The Municipality has no formal authority over the approval of a radiocommunication facility. If issues of concern are raised through the review process, the Municipality favours a process that allows for the proponent and the Municipality to mutually seek resolution. If necessary, representatives from ISED may be consulted to assist in the resolution and move the discussions forward. Should parties continue to be unable to reach a mutually agreeable solution, either party may request that ISED make a final decision.

**12. Appendices**

Appendix A: Radiocommunication Facilities Review Process Flow Chart  
Appendix B: CPC-2-0-03 – Radiocommunication and Broadcasting Antenna Systems.

**13. Review Cycle**

This policy will be reviewed on an as-needed basis.

**14. Related Information**

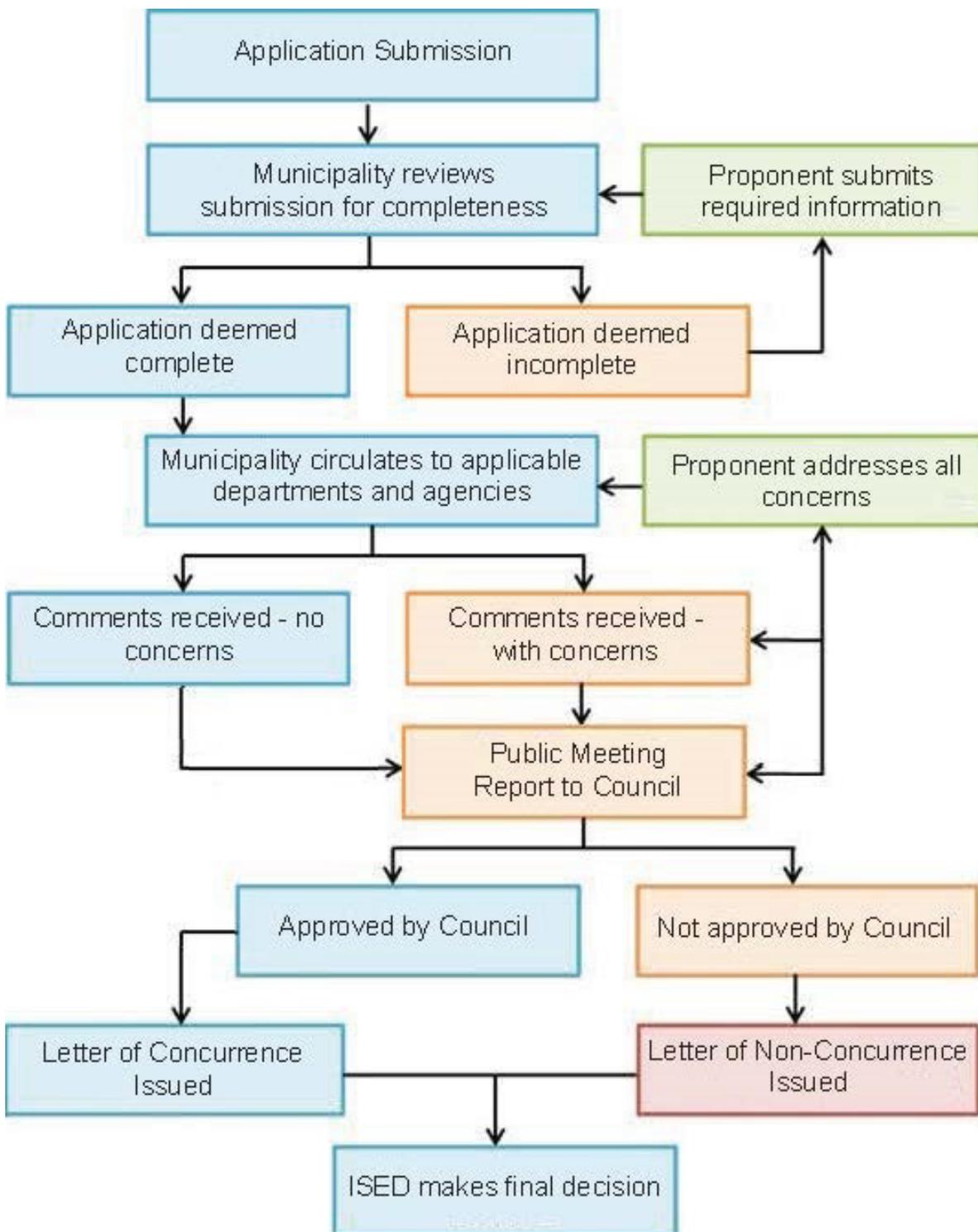
Revisions to this document may impact the following policies, procedures, and/or by-laws.

| #   | Document Title   |
|-----|--|
| N/A | No related documents were identified at the time the policy was passed |

**15. Policy Revisions**

| Version | Date Approved   | Council Resolution |
|---------|-----------------|--------------------|
| 1       | October 3, 2023 | R2023-             |

## Appendix A: Radiocommunication Facilities Review Process Flow Chart





# Appendix B:

Spectrum Management and Telecommunications

Client Procedures Circular

## Radiocommunication and Broadcasting Antenna Systems

## Preface

Client Procedures Circular CPC-2-0-03, *Radiocommunication and Broadcasting Antenna Systems*, issue 6, replaces CPC-2-0-03, issue 5, dated June 26, 2014.

The following are the main changes:

- implemented official languages requirements for the public consultation process, which will apply to public consultations commenced on or after August 1, 2023
- updated the name of the department to Innovation, Science and Economic Development Canada (ISED) throughout
- updated references to the *Canadian Environmental Assessment Act* to reflect the coming into force of the *Impact Assessment Act*
- updated Transport Canada references and details relating to aeronautical safety responsibilities to reflect current forms and definitions
- adopted the text proposed by NAV Canada regarding land-use proposal submission forms
- made editorial changes and clarifications, as appropriate

Comments and suggestions may be directed to the following address:

Innovation, Science and Economic Development Canada  
Spectrum Management Operations Branch  
235 Queen Street  
Ottawa ON K1A 0H5

Attention: Spectrum Management Operations

Email: [spectrumoperations-operationsduspectre@ised-isde.gc.ca](mailto:spectrumoperations-operationsduspectre@ised-isde.gc.ca)

All spectrum-related documents referred to in this paper are available on ISED's Spectrum Management and Telecommunications website.

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## 1. Introduction

Radiocommunication and broadcasting services are important for all Canadians and are used daily by the public, safety and security organizations, government, wireless service providers, broadcasters, utilities and businesses. In order for radiocommunication and broadcasting services to work, antenna systems including masts, towers, and other supporting structures are required. Antenna systems are normally composed of an antenna and some type of supporting structure, often called an antenna tower. Most antennas have their own integral mast so that they can be fastened directly to a building or a tower. There is a certain measure of flexibility in the placement of antenna systems, which is constrained to some degree by the need to achieve acceptable coverage for the service area, the availability of sites, technical limitations, and safety. In exercising its mandate, Innovation, Science and Economic Development Canada (ISED) believes that it is important that antenna systems be deployed in a manner that considers the local surroundings.

### 1.1 Mandate

Section 5 of the *Radiocommunication Act* states that the Minister may, taking into account all matters the Minister considers relevant for ensuring the orderly development and efficient operation of radiocommunication in Canada, issue radio authorizations and approve each site on which radio apparatus, including antenna systems, may be located. Further, the Minister may approve the erection of all masts, towers and other antenna-supporting structures. Accordingly, proponents must follow the process outlined in this document when installing or modifying an antenna system. Also, the installation of an antenna system or the operation of a currently existing antenna system that is not in accordance with this process may result in its alteration or removal and other sanctions against the operator in accordance with the *Radiocommunication Act*.

### 1.2 Application

The requirements of this document apply to anyone who is planning to install or modify an antenna system, regardless of the type (referred to in this document as the “proponent”). This includes telecommunications carriers, businesses, governments, Crown agencies, operators of broadcasting undertakings and the public (including for amateur radio operation and over-the-air TV reception).

Anyone who proposes, uses or owns an antenna system must follow these procedures. The requirements also apply to those who install towers or antenna systems on behalf of others or for leasing purposes (“third party tower owners”). As well, parts of this process contain ongoing obligations that apply to existing antenna system owners and operators.

For the purposes of this document:

- An “antenna system” is normally composed of an antenna and some sort of supporting structure, normally a tower. Most antennas have their own integral mast so that they can be fastened directly to a building or a tower. Thus, where this document refers to an “antenna,” the term includes the integral mast.

- A “telecommunications carrier” means a person who owns or operates a transmission facility used by that person or another person to provide telecommunications services to the public for compensation.

### 1.3 Process overview

This document outlines the process that must be followed by proponents seeking to install or modify antenna systems. The broad elements of the process are as follows:

1. investigating sharing or using existing infrastructure before proposing new antenna-supporting structures
2. contacting the land-use authority to determine local requirements regarding antenna systems
3. undertaking public notification and addressing relevant concerns, whether by following local land-use authority requirements or ISED’s default process, as is required and appropriate
4. satisfying ISED’s general and technical requirements
5. completing the construction

It is ISED’s expectation that steps 2 to 4 will normally be completed within **120 days**. Some proposals may be excluded from certain elements of the process (see section 6). It is ISED’s expectation that all parties will carry out their roles and responsibilities in good faith and in a manner that respects the spirit of this document. If the requirements of this document are satisfied and the proposal proceeds, then, under step 5, construction of the antenna system must be completed within **three years** of conclusion of consultation.

## 2. ISED engagement

There are a number of points in the processes outlined in this document where parties must contact ISED to proceed. Further, anyone with questions regarding the process may contact the local ISED office for guidance (refer to Radiocommunication Information Circular RIC-66, *Addresses and Telephone Numbers of District Offices*). Based on a query by an interested party, ISED may request parties to provide relevant records and/or may provide direction to one or more parties to undertake certain actions to help move the process forward.

### 3. Use of existing infrastructure (sharing)

This section outlines the roles of proponents and owners/operators of existing antenna systems. In all cases, parties should retain records (such as analyses, correspondence and engineering reports) relating to this section. See also Client Procedures Circular CPC-2-0-17, *Conditions of Licence for Mandatory Roaming and Antenna Tower and Site Sharing and to Prohibit Exclusive Site Arrangements*.

Before building a new antenna-supporting structure, ISED requires that proponents first explore the following options:

- consider sharing an existing antenna system, modifying or replacing a structure if necessary
- locate, analyze and attempt to use any feasible existing infrastructure such as rooftops, water towers, etc.

A proponent is not normally expected to build a new antenna-supporting structure where it is feasible to locate an antenna on an existing structure, unless a new structure is preferred by the land-use authority.

Owners and operators of existing antenna systems are to respond to a request to share in a timely fashion and to negotiate in good faith to facilitate sharing where feasible. It is anticipated that **30 days** is reasonable time for existing antenna system owners/operators to reply to a request by a proponent in writing with one of the following:

- a proposed set of reasonable terms to govern the sharing of the antenna system
- a detailed explanation of why sharing is not possible

### 4. Land-use authority and public consultation

#### Contacting the land-use authority

Proponents must always contact the applicable land-use authorities to determine the local consultation requirements and to discuss local preferences regarding antenna system siting and/or design, unless their proposal falls within the exclusion criteria outlined in section 6. If the land-use authority has designated an official to deal with antenna systems, then proponents are to engage the authority through that person. If not, proponents must submit their plans directly to the council, elected local official or executive. The **120-day** consultation period commences only once proponents have formally submitted, in writing, all plans required by the land-use authority, and does not include preliminary discussions with land-use authority representatives.

Proponents should note that there may be more than one land-use authority with an interest in the proposal. Where no established agreement exists between such land-use authorities, proponents must, as a minimum, contact the land-use authority(ies) and/or neighbouring land-use authorities

located within a radius of three times the tower height, measured from the tower base or the outside perimeter of the supporting structure, whichever is greater. As well, in cases where proponents are aware that a potential Aboriginal or treaty right or land claim may be affected by the proposed installation, they must contact ISED in order to ensure that the requirements for consultation are met. Proponents are encouraged to refer to local community and online resources (for example, the Aboriginal and Treaty Rights Information System (ATRIS)) as applicable.

### **Following the land-use authority process**

Proponents must follow the land-use consultation process for the siting of antenna systems, established by the land-use authority, where one exists. In the event that a land-use authority's existing process has no public consultation requirement, proponents must then fulfill the public consultation requirements contained in ISED's default public consultation process (see section 4.2). Proponents are not required to follow this requirement if the land-use authority's established process explicitly excludes their type of proposal from consultation or it is excluded by ISED's criteria. In all cases, telecommunications carriers, broadcasting undertakings and third party tower owners must notify and consult with the local public when proposing a new antenna tower, either by following ISED's default public consultation process or, where one exists, the land-use authority's public consultation process. Where proponents believe the local consultation requirements are unreasonable, they may contact the local ISED office in writing for guidance.

### **Broadcasting undertakings**

Applicants for broadcasting undertakings are subject to Canadian Radio-television and Telecommunications (CRTC) licensing processes in addition to ISED requirements. Although ISED encourages applicants to consult as early as practical in the application process, in some cases it may not be prudent for applicants to initiate public and municipal/land-use consultation before receiving CRTC approval, as application denial by the CRTC would have resulted in unnecessary work for all parties involved. Therefore, assuming that the proposal is not otherwise excluded, broadcasting applicants may opt to commence land-use consultation after having received CRTC approval. However, broadcasting applicants choosing this approach are required, at the time of the CRTC application, to notify the land-use authority with a Letter of Intent outlining a commitment to conduct consultation after receiving CRTC approval. If the land-use authority raises concerns with the proposal as described in the Letter of Intent, applicants are encouraged to engage in discussions with the land-use authority regarding their concerns and attempt to resolve any issues. Refer to Broadcasting Procedures and Rules, Part 1 (BPR-1), for further details.

#### 4.1 Land-use authority consultation

ISED believes that any concerns or suggestions expressed by land-use authorities are important elements to be considered by proponents regarding proposals to install, or make changes to, antenna systems. As part of their community planning processes, land-use authorities should facilitate the implementation of local radiocommunication services by establishing consultation processes for the siting of antenna systems. Municipalities may also wish to refer to the Antenna System Siting Protocol Template developed in partnership between the Federation of Canadian Municipalities (FCM) and the Canadian Wireless Telecommunications Association (CWTA).

Unless the proposal meets the exclusion criteria outlined in section 6, proponents must consult with the local land-use authority(ies) on any proposed antenna system prior to any construction. The aim of this consultation is to:

- discuss site options
- ensure that local processes related to antenna systems are respected
- address reasonable and relevant concerns (see section 4.2) from both the land-use authority and the community they represent
- obtain land-use authority concurrence in writing

Land-use authorities are encouraged to establish reasonable, relevant, and predictable consultation processes specific to antenna systems that consider such things as:

- the designation of suitable contacts or responsible officials
- proposal submission requirements
- public consultation
- documentation of the concurrence process
- the establishment of milestones to ensure consultation process completion within **120 days**

ISED is available to assist land-use authorities in the development of local processes. In addition, land-use authorities may wish to consult ISED's guide for the development of local consultation processes.

Where they have specific concerns regarding a proposed antenna system, land-use authorities are expected to discuss reasonable alternatives and/or mitigation measures with proponents.

Under their processes, land-use authorities may exclude from consultation any antenna system installation in addition to those identified by ISED's own consultation exclusion criteria (section 6). For example, an authority may wish to exclude from consultation those installations located within

industrial areas removed from residential areas, low visual impact installations, or certain types of structures located within residential areas such as personal antenna systems (e.g. used for over the air and satellite television reception or amateur radio operation).

#### 4.2 ISED's default public consultation process

Proponents must follow ISED's default public consultation process where the local land-use authority does not have an established and documented public consultation process applicable to antenna siting. ISED's default process has three steps whereby the proponent:

1. provides written notification to the public, the land-use authority and ISED of the proposed antenna system installation or modification (i.e. public notification)
2. engages the public and the land-use authority in order to address relevant questions, comments and concerns regarding the proposal (i.e. responding to the public)
3. provides an opportunity to the public and the land-use authority to formally respond in writing to the proponent regarding measures taken to address reasonable and relevant concerns (i.e. public reply comment)

#### Public notification

1. Proponents must ensure that the local public, the land-use authority and ISED are notified of the proposed antenna system. As a minimum, proponents must provide a notification package (see annex A) to the local public (including nearby residences, community gathering areas, public institutions, schools, etc.), neighbouring land-use authorities, businesses, and property owners, etc. located within a radius of three times the tower height (proponents are advised that municipalities may set reasonable public notification distances appropriate for their communities when establishing their own protocols). The radius is measured from the outside perimeter of the supporting structure. For the purpose of this requirement, the outside perimeter begins at the furthest point of the supporting mechanism, be it the outermost guy line, building edge, face of the self-supporting tower, etc. Public notification of an upcoming consultation must be clearly marked, making reference to the proposed antenna system, so that it is not misinterpreted as junk mail. The notice must be sent by mail or be hand delivered. The face of the package must clearly reference that the recipient is within the prescribed notification radius of the proposed antenna system.
2. It is the proponent's responsibility to ensure that the notification provides at least **30 days** for written public comment.
3. In addition to the minimum notification distance noted above, in areas of seasonal residence, the proponent, in consultation with the land-use authority, is responsible for determining the best manner to notify such residents to ensure their engagement.

4. In addition to the public notification requirements noted above, proponents of an antenna system proposed to be 30 metres or more in height must place a notice in a local community newspaper circulating in the proposed area. Height is measured from the lowest ground level at the base, including the foundation, to the tallest point of the antenna system. Depending on the particular installation, the tallest point may be an antenna, lightning rod, aviation obstruction lighting, or some other appurtenance. Any attempt to artificially reduce the height (addition of soil, aggregate, etc.) will not be included in the calculation or measurement of the height of the antenna system.

The notice must be synchronized with the distribution of the public notification package. It must be legible and placed in the public notice section of the newspaper. The notice must include:

- a description of the proposed installation
- its location and street address
- proponent contact information and mailing address
- an invitation to provide public comments to the proponent within **30 days** of the notice

In areas without a local newspaper, other effective means of public notification must be implemented. Proponents may contact the local ISED office for guidance.

### Responding to the public

Proponents are to address all reasonable and relevant concerns, make all reasonable efforts to resolve them in a mutually acceptable manner and must keep a record of all associated communications. If the local public or land-use authority raises a question, comment or concern relating to the antenna system as a result of the public notification process, then the proponent is required to:

1. respond to the party in writing within **14 days** acknowledging receipt of the question, comment or concern, and keep a record of the communication
2. address in writing all reasonable and relevant concerns within **60 days** of receipt or explain why the question, comment or concern is not, in the view of the proponent, reasonable or relevant
3. in the written communication referred to in the preceding point, clearly indicate that the party has **21 days** from the date of the correspondence to reply to the proponent's response (the proponent must provide a copy of all public reply comments to the local ISED office)

Responding to reasonable and relevant concerns may include contacting a party by telephone, engaging in a community meeting or having an informal, personal discussion. Between steps 1 and 2 above, the proponent is expected to engage the public in a manner it deems most appropriate. Therefore, the letter at step 2 above may be a record of how the proponent and the other party addressed the concern at hand.

### Public reply comments

As indicated in step 3 above, the proponent must clearly indicate that the party has **21 days** from the date of the correspondence to reply to the response. The proponent must also keep a record of all correspondence/discussions that occurred within the **21-day** public reply comment period. This includes records of any agreements that may have been reached and/or any concerns that remain outstanding.

The factors that will determine whether a concern is reasonable or relevant according to this process will vary but will generally be considered if they relate to the requirements of this document and to the particular amenities or important characteristics of the area surrounding the proposed antenna system.

Examples of concerns that proponents are to address may include:

- Why is the use of an existing antenna system or structure not possible?
- Why is an alternate site not possible?
- What is the proponent doing to ensure that the antenna system is not accessible to the general public?
- How is the proponent trying to integrate the antenna into the local surroundings?
- What options are available to satisfy aeronautical obstruction marking requirements at this site?
- What are the steps the proponent took to ensure compliance with the general requirements of this document, including the *Impact Assessment Act*, Safety Code 6, etc.?

Concerns that are not relevant include:

- disputes with members of the public relating to the proponent's service, but unrelated to antenna installations
- potential effects that a proposed antenna system will have on property values or municipal taxes
- questions whether the *Radiocommunication Act*, this document, Safety Code 6, locally established by-laws, other legislation, procedures or processes are valid or should be reformed in some manner

### 4.3 Concluding consultation

The proponent may only commence installation/modification of an antenna system after the consultation process has been completed by the land-use authority, or ISED confirms concurrence with the consultation portion of this process, and after all other requirements under this process have been met. Consultation responsibilities will normally be considered complete when the proponent has:

1. concluded consultation requirements (section 4.1) with the land-use authority
2. carried out public consultation either through the process established by the land-use authority or ISED's default public consultation process where required
3. addressed all reasonable and relevant concerns

#### Concluding land-use authority consultation

ISED expects that land-use consultation will be completed within **120 days** from the proponent's initial formal contact with the local land-use authority. Where unavoidable delays may be encountered, the land-use authority is expected to indicate when the proponent can expect a response to the proposal. If the authority is not responsive, the proponent may contact ISED. Depending on individual circumstances, ISED may support additional time or consider the land-use authority consultation process concluded.

Depending on the land-use authority's own process, conclusion of local consultation may include such steps as obtaining final concurrence for the proposal via the relevant committee, a letter or report acknowledging that the relevant municipal process or other requirements have been satisfied, or other valid indication, such as the minutes of a town council meeting indicating land-use authority approval. Compliance with informal city staff procedures, or grants of approval strictly related to zoning, construction, etc., will not normally be sufficient.

ISED recognizes that approvals for construction (e.g. building permits) are used by some land-use authorities as evidence of consultation being concluded. Proponents should note that ISED does not consider the fact a permit was issued as confirmation of concurrence, as different land-use authorities have different approaches. As such, ISED will only consider such approvals as valid when the proponent can demonstrate that the land-use authority's process was followed and that the land-use authority's preferred method of concluding land-use authority consultation is through such an approval.

#### Concluding ISED's default public consultation process

ISED's default public consultation process will be considered concluded when the proponent has either:

- received no written questions, comments or concerns to the formal notification within the **30-day** public comment period or

- if written questions, comments or concerns were received, the proponent has addressed and resolved all reasonable and relevant concerns and the public has not provided further comment within the **21-day** reply comment period

In the case where the public responds within the **21-day** reply comment period, the proponent has the option of making further attempts to address the concern on its own, or can request ISED engagement. If a request for engagement is made at this stage, ISED will review the relevant material, request any further information it deems pertinent from any party, and may then decide that:

- the proponent has met the consultation requirements of this process and that ISED concurs that installation or modification may proceed, or
- the parties should participate in further attempts to mitigate or resolve any outstanding concerns

#### **4.4 Communicating in both official languages**

The following requirements will apply to all proponents for all public consultation processes commenced on or after August 1, 2023:

- Whether the proponent follows the land-use authority's consultation process or ISED's default public consultation process, initial communications with the public (including but not limited to notification packages and public notices) must be made in both official languages in communities located in census subdivisions that have a minority official language population of any size. A list of the census subdivisions where this requirement applies is published on ISED's website, and ISED will update the list from time to time.
- If, in the context of the public consultation process, a member of the public in any of these communities provides written or verbal questions, comments, relevant concerns, or reply comments, the proponent must respond in the official language in which the questions, comments, relevant concerns, or reply comments were made.
- Proponents must follow the consultation process established by the land-use authority, where one exists. In the event that a land-use authority's existing process requires bilingual communications with the public, proponents must follow those public consultation requirements.

For the purposes of determining the date a public consultation is commenced and the applicability of this section, a public consultation is commenced as soon as the proponent makes any initial consultation with the public, such as through sending a notification package, posting signs or publishing an announcement in local media.

Prior to August 1, 2023, proponents must follow the official language requirements set out by a land-use authority when consulting with the general public using the land-use authority's process; when using ISED's default consultation process, proponents should contact the land-use authority to determine the best manner of notifying the public to ensure their engagement.

#### **4.5 Post-consultation**

Whether the proponent followed a land-use authority's consultation process or ISED's default public consultation process, construction of an antenna system must be completed within three years of the conclusion of consultation. After three years, consultations will no longer be deemed valid except in the case where a proponent secures the agreement of the relevant land-use authority to an extension for a specified time period in writing. A copy of the agreement must be provided to the local ISED office.

### **5. Dispute resolution process**

The dispute resolution process is a formal process intended to bring about the timely resolution where the parties have reached an impasse.

Upon receipt of a written request from a stakeholder other than the general public asking for ISED intervention concerning a reasonable and relevant concern, ISED may request that all involved parties provide and share all relevant information. ISED may also gather or obtain other relevant information and request that parties provide any further submissions if applicable. ISED will, based on the information provided, either:

- make a final decision on the issue(s) in question, and advise the parties of its decision or
- suggest the parties enter into an alternate dispute resolution process in order to come to a final decision; should the parties be unable to reach a mutually agreeable solution, either party may request that ISED make a final decision

Upon resolution of the issue under dispute, the proponent is to continue with the process contained within this document as required.

### **6. Exclusions**

All proponents must satisfy the general requirements outlined in section 7 regardless of whether an exclusion applies to their proposal. All proponents must also consult the land-use authority and the public unless a proposal is specifically excluded. Individual circumstances vary with each antenna system installation and modification, and the exclusion criteria below should be applied in consideration of local circumstances. Consequently, it may be prudent for the proponent to consult even though the proposal meets an exclusion noted below.

Therefore, when applying the criteria for exclusion, proponents should consider such things as:

- the antenna system's physical dimensions, including the antenna, mast, and tower, compared to the local surroundings
- the location of the proposed antenna system on the property and its proximity to neighbouring residents
- the likelihood of an area being a community-sensitive location
- Transport Canada's marking and lighting requirements for the proposed structure

The following proposals are excluded from land-use authority and public consultation requirements:

- **New antenna systems:** where the height is less than 15 metres above ground level. This exclusion does not apply to antenna systems proposed by telecommunications carriers, broadcasting undertakings or third party tower owners.
- **Existing antenna systems:** where modifications are made, antennas added or the tower replaced, including to facilitate sharing, provided that the total cumulative height increase is no greater than 25% of the height of the initial antenna system installation. The exclusion for the replacement of existing antenna systems applies to replacements that are similar to the original design and location; "initial antenna system installation" refers to the system as it was first consulted on, or installed. No increase in height may occur within one year of completion of the initial construction. This exclusion does not apply to antenna systems using purpose built antenna supporting structures with a height of less than 15 metres above ground level operated by telecommunications carriers, broadcasting undertakings or third party tower owners.
- **Non-tower structures:** including antennas on buildings, water towers, lamp posts, etc. These may be excluded from consultation provided that the height above ground of the non-tower structure, exclusive of appurtenances, is not increased by more than 25%. Telecommunications carriers, operators of broadcasting undertakings and third party tower owners may benefit from local knowledge by contacting the land-use authority when planning an antenna system that meets this exclusion criteria.
- **Temporary antenna systems:** used for special events or emergency operations. Temporary antenna systems must be removed within three months after the start of the emergency or special event.

No consultation is required prior to performing maintenance on an existing antenna system.

Proponents who are not certain if their proposals are excluded, or whether consultation may still be prudent, are advised to contact the land-use authority and/or ISED for guidance.

Height is measured from the lowest ground level at the base, including the foundation, to the tallest point of the antenna system. Depending on the particular installation, the tallest point may be an antenna, lightning rod, aviation obstruction lighting or some other appurtenance. Any attempt to artificially reduce the height (addition of soil, aggregate, etc.) will not be included in the calculation or measurement of the height of the antenna system.

## 7. General requirements

In addition to roles and responsibilities for site sharing, land-use consultation and public consultation, proponents must also fulfill other important obligations including the following:

- compliance with Health Canada's Safety Code 6 guideline for the protection of the general public
- compliance with radio frequency immunity criteria
- notification of nearby broadcasting stations
- environmental considerations
- Transport Canada aeronautical safety responsibilities
- NAV CANADA air navigation facilities

### 7.1 Radio frequency exposure limits

Health Canada has established safety guidelines for exposure to radio frequency fields in its Safety Code 6, *Limits of Human Exposure to Radiofrequency Electromagnetic Energy in the Frequency Range from 3 kHz to 300 GHz*. While the responsibility for developing Safety Code 6 rests with Health Canada, ISED has adopted this guideline for the purpose of protecting the general public. Current biomedical studies in Canada and other countries indicate that there is no scientific or medical evidence that a person will experience adverse health effects from exposure to radio frequency fields, provided that the installation complies with Safety Code 6.

It is the responsibility of proponents and operators of installations to ensure that all radiocommunication and broadcasting installations comply with Safety Code 6 at all times, including the consideration of combined effects of nearby installations within the local radio environment.

Telecommunications common carriers and operators of broadcasting undertakings are to carry out an exposure evaluation on all new installations and following any increases in radiated power. Either measurement surveys or mathematical or numerical computations can be used for this evaluation. Where the radio frequency emission of any installation, whether telecommunications carrier or broadcasting operator, is greater than, or is equal to, 50% of the Safety Code 6 limits for uncontrolled environments at locations accessible to the general public (i.e. not solely available for access by workers), the operator(s) of radio frequency emitters must notify ISED and demonstrate compliance with Safety Code 6. This determination of 50% of Safety Code 6 must be in consideration of the local radio environment.

For all proponents following ISED's default public consultation process, the proponent's notification package must provide a written attestation that there will be compliance with Safety Code 6 for the protection of the general public, including consideration of nearby radiocommunication systems. The notification package must also indicate any Safety Code 6 related signage and access control mechanisms that may be used.

Compliance with Safety Code 6 is an ongoing obligation. At any time, antenna system operators may be required, as directed by ISED, to demonstrate compliance with Safety Code 6 by (i) providing detailed calculations, and/or (ii) conducting site surveys and, where necessary, by implementing corrective measures (see CPC-2-0-20, *Radio Frequency (RF) Fields – Signs and Access Control*). At the request of ISED, telecommunications carriers and operators of broadcasting undertakings must provide detailed compliance information for individual installations within **5 days** of the request. Proponents and operators of existing antenna systems must retain copies of all information related to Safety Code 6 compliance, such as analyses and measurements.

## **7.2 Radio frequency immunity**

All radiocommunication and broadcasting proponents and existing spectrum users are to ensure that their installations are designed and operated in accordance with ISED's immunity criteria as outlined in EMCAB-2, *Criteria for Resolution of Immunity Complaints Involving Fundamental Emissions of Radiocommunications Transmitters*, in order to minimize the malfunctioning of electronic equipment in the local surroundings. Broadcasting proponents and existing undertakings should refer to Broadcasting Procedures and Rules: Part 1 (BPR-1), *General Rules*, for additional information and requirements on this matter.

Proponents are advised to consider the potential effect that their proposal may have on nearby electronic equipment. In this way, they will be better prepared to respond to any questions that may arise during the public and land-use consultation processes, or after the system has been installed.

Land-use authorities should be prepared to advise proponents and owners of broadcasting undertakings of plans for the expansion or development of nearby residential and/or industrial areas. Such expansion or development generally results in the introduction of more electronic equipment in the area and therefore an increased potential for electronic equipment to malfunction. By keeping broadcasters aware of planned developments and changes to adjacent land-use, they will be better able to work with the community. Equally, land-use authorities have a responsibility to ensure that those moving into these areas, whether prospective residents or industry, are aware of the potential for their electronic equipment to malfunction when located in proximity to an existing broadcasting installation. For example, the land-use authority could ensure that clear notification be provided to future prospective purchasers.

## **7.3 Proximity of proposed structure to broadcasting undertakings**

Where the proposal would result in a structure that exceeds 30 metres above ground level, the proponent is to notify operators of AM, FM and TV undertakings within 2 kilometres, due to the potential impact the physical structure may have on these broadcasting undertakings. Metallic structures close to an AM directional antenna array may change the antenna pattern of the AM broadcasting undertaking. These proposed structures can also reflect nearby FM and TV signals, causing "ghosting" interference to FM/TV receivers used by the general public.

## 7.4 Impact Assessment Act

ISED requires that the installation and modification of antenna systems be done in a manner that complies with appropriate environmental legislation. This includes the *Impact Assessment Act* (IAA), where the antenna system is incidental to a physical activity or project designated under the IAA, or is located on federal lands.

An antenna system may not proceed where it is incidental to a designated project (as described in the *Physical Activities Regulations*), or is otherwise expressly designated by the Minister of the Environment without satisfying certain requirements applicable to designated projects. Therefore, a proponent of this type of project must contact ISED for direction on how to proceed.

Any proposed antenna system on federal land may not proceed without a determination of “significant adverse environmental effects” by ISED. In order to assist ISED in making such a determination, proponents must submit a project description to ISED, considering and addressing those elements of the environment described in the IAA, as well as any determination of environmental effects that may have been made by the authority responsible for managing the federal land. ISED may also require further information before it can complete its assessment. ISED will inform the proponent of the results of its determination and may impose conditions related to mitigating any adverse effects after making its determination and/or may need to refer the matter to the Governor in Council under the IAA.

In addition, notices under ISED’s default public consultation process require written confirmation of the project’s status under the IAA (e.g. whether it is incidental to a designated project or, if not, whether it is on federal lands).

In addition to IAA requirements, proponents are responsible for ensuring that antenna systems are installed and operated in a manner that respects the local environment and that complies with other statutory requirements, such as those under the *Canadian Environmental Protection Act, 1999*, the *Migratory Birds Convention Act, 1994*, and the *Species at Risk Act*, as applicable.

For projects north of the 60th parallel, environmental assessment requirements may arise from federal statutes other than the aforementioned Acts or from Comprehensive Land Claim Agreements. ISED requires that the installation or modification of antennas or antenna supporting structures be done in accordance with these requirements, as appropriate.

## 7.5 Aeronautical safety

Proponents must ensure their proposals for any antenna system are first reviewed by Transport Canada and NAV CANADA.

Transport Canada will perform an assessment of the proposal with respect to the potential hazard to air navigation and will notify proponents of any painting and/or lighting requirements for the antenna system. NAV CANADA will comment on whether the proposal has an impact on the provision of their national air navigation system, facilities and other services located off-airport.

As required, the proponent must:

1. submit a completed Aeronautical Assessment Form to Transport Canada
2. submit a completed Land Use Proposal Submission Form to NAV CANADA
3. include any Transport Canada marking/lighting requirements in the public notification package
4. install and maintain the antenna system in a manner that is not a hazard to aeronautical safety
5. retain all correspondence

For those antenna systems subject to ISED's default public consultation process, the proponent will inform the community of any marking/lighting requirements. Where options are possible, proponents are expected to work with the local community and Transport Canada to implement the best and safest marking/lighting options. Proponents should be aware that Transport Canada does not advise ISED of marking/lighting requirements for proposed structures. Proponents are reminded that the addition of, or modification to, obstruction markings may result in community concern and so any change is to be done in consultation with the local public, land-use authority and/or Transport Canada, as appropriate.

### **References and details**

Aeronautical assessment forms are available from any Transport Canada Regional Office. Both the Aeronautical Assessment Form for Obstacle Notice and Assessment (#26-0427) and a list of Transport Canada regional offices are available on the Transport Canada website. Completed forms are to be submitted directly to the nearest Transport Canada regional office. (Refer to Canadian Aviation Regulations, Standard 621 - Obstruction Marking and Lighting).

Land-use proposal submission forms are available on the NAV CANADA website (search the keywords "land use proposal"). Completed forms are to be sent to the NAV CANADA Land Use Office. NAV CANADA will assess whether a proposal has impacts on the safe and efficient provision of air navigation services and their facilities on- or off-airports.

**Annex A: ISED's default public consultation process – Public notification package**

The proponent must ensure that at least **30 days** are provided for public comment. Notification must provide all information on how to submit comments to the proponent in writing. Notices must be clearly marked, making reference to the proposed antenna system, so that it is not misinterpreted as junk mail. The notice must be sent by mail or be hand delivered. The face of the package must clearly indicate that the recipient is within the prescribed notification radius of the proposed antenna system. The proponent must also provide a copy of the notification package to the land-use authority and the local ISED office at the same time as the package is provided to the public. Notification must include, but need not be limited to:

1. the proposed antenna system's purpose, the reasons why existing antenna systems or other infrastructure cannot be used, a list of other structures that were considered unsuitable and future sharing possibilities for the proposal
2. the proposed location within the community, the geographic coordinates and the specific property or rooftop
3. an attestation that the general public will be protected in compliance with Health Canada's Safety Code 6, including combined effects within the local radio environment at all times; for example:

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| I, <i>(name of individual or representative of company)</i> attest that the radio installation described in this notification package will be installed and operated on an ongoing basis so as to comply with Health Canada's Safety Code 6, as may be amended from time to time, for the protection of the general public, including any combined effects of nearby installations within the local radio environment. |
|--|

4. identification of areas accessible to the general public and the access/demarcation measures to control public access
5. information on the environmental status of the project, including any requirements under the *Impact Assessment Act*
6. a description of the proposed antenna system including its height and dimensions, a description of any antenna that may be mounted on the supporting structure and simulated images of the proposal
7. Transport Canada's aeronautical obstruction marking/lighting requirements (whether painting, lighting or both) if available; if not available, the proponent's expectation of Transport Canada's requirements together with an undertaking to provide Transport Canada's requirements once they become available

8. an attestation that the installation will respect good engineering practices including structural adequacy
9. reference to any applicable local land-use requirements such as local processes, protocols, etc.
10. notice that general information relating to antenna systems is available on ISED's Spectrum Management and Telecommunications website
11. contact information for the proponent, land-use authorities and the local ISED office
12. closing date for submission of written public comments (not less than **30 days** from receipt of notification)