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Guide to Assist Land-use Authorities in Developing Antenna Siting Protocols

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1. Introduction

This guide is intended to assist Land-use Authorities (LUA) in ensuring effective local participation in decisions with respect to proposed antennas and their supporting structures within their communities. For the purposes of this guide, an LUA means any local authority that governs land-use issues and includes a municipality, town council, regional commission, development authority, township board, band council or other similar body. This guide complements Industry Canada's publication Client Procedures Circular 2-0-03, Issue 4, entitled *Radiocommunication and Broadcasting Antenna Systems* (CPC-2-0-03). For this reason, LUAs are encouraged to consult CPC-2-0-03 to better understand their roles and responsibilities as well as those of anyone planning to install or modify a radiocommunication or broadcasting antenna system (referred to as a "proponent").

This guide specifically addresses two areas:

- **Participation Process:** The LUA's role in effectively participating and influencing decisions with respect to proposed antenna systems within Industry Canada's antenna siting procedures. Industry Canada believes that antenna siting protocols jointly developed between proponents and LUAs can supplement the Department's antenna siting procedures while at the same time have a higher degree of acceptance and compliance.
- **Local Protocol Development:** Elements that LUAs might wish to include when developing protocols with proponents of antenna systems.

The federal Minister of Industry has the authority under the *Radiocommunication Act*, to issue radio authorizations, to approve each site on which antenna systems installations (referred to as "antenna systems" or "installations") may be located, and to approve the erection of all masts, towers and other antenna-supporting structures. Industry Canada's role includes ensuring the orderly development and efficient operation of radiocommunications in Canada. In this regard, Industry Canada considers that the LUA's and local residents' questions, comments and concerns are important elements to be considered by a proponent seeking to install, or make major modifications to, an antenna system.

The continual demand from Canadians who wish to benefit from the most advanced wireless communication features available, whether at home or at the office, has resulted in the growth and advancement of wireless technologies. Antenna systems are an essential component in providing wireless services and must be installed on towers, buildings or other supporting structures. Both antennas and the structures that support them are an integral part of the wireless network and they provide the radio coverage the public and safety services need. With advancements in radiocommunication and the growing demand for high-speed wireless access, communities in Canada either are experiencing, or will soon experience, deployment of these services.

LUAs, because of their local knowledge, are very well qualified to explain to proponents the particular amenities, sensitivities, planning priorities and other relevant characteristics of their area. By working together, LUAs and proponents can find solutions which address reasonable and relevant concerns, or, as an option, alternative antenna system siting arrangements. Accordingly, Industry Canada encourages LUAs to develop local protocols to manage the process of identifying their concerns, as well as those of the residents they represent, regarding antenna installations. Protocols can assist proponents who are planning to modify or install antennas and supporting structures, while at the same time give due

consideration to local land-use plans, publicly sensitive areas and specific environmentally sensitive areas.

For the purpose of this document, Industry Canada will refer to any written local guideline, policy or process that addresses the issue of antenna placement as a “protocol”. Cooperation between LUAs and proponents through clear and reasonable protocols can result in the development of new and enhanced wireless services in a community friendly manner.

Industry Canada¹ is available to assist in the creation of local land-use protocols for antenna system installations.

2. Participation Process

There are a number of steps typically involved when a proponent chooses a site for their antenna system installation, one of which is, unless specifically excluded under Industry Canada’s process, consulting with the LUA. The residents and businesses in an LUA’s area look to their LUA to provide local knowledge, experience and leadership. Through its participation, the LUA can effectively ensure that any questions, comments or concerns that they or their local community may have, are appropriately addressed by the proponent in the antenna system site selection process.

The subsections that follow suggest various aspects that an LUA may want to take into consideration when developing antenna siting protocols. Protocols are an effective means for an LUA to convey its preferences as well as those of the community it represents, to antenna system proponents.

2.1 Placement of Antenna System

Before a proponent approaches an LUA it has most likely given careful consideration to various antenna system placement options, including using existing structures such as building rooftops and water towers to minimize the impact on the local community. Radiocommunication antennas need to be strategically located to satisfy specific technical criteria and operational requirements. Therefore, there is a limited measure of flexibility in the placement of antennas and proponents are constrained to some degree by:

- the need to achieve the required radiocommunication coverage, often in response to public demand;
- the availability and physical limitations of nearby existing structures (towers, rooftops, water towers, etc.) to accommodate additional antennas; and
- the securing of lease agreements to permit access to an existing structure.

Consequently, the LUA’s or the public’s preferred location for siting an antenna installation may not always be feasible.

LUAs are encouraged to develop protocols that are clear and within their area of responsibility while not

¹ Please refer to Radiocommunication Information Circular 66 (RIC-66) for a list of addresses and telephone numbers for Industry Canada’s regional and district offices. RIC-66 is available via the Internet at: <http://ic.gc.ca/epic/internet/insmt-gst.nsf/en/sf01742e.html>.

being more burdensome for proponents than the processes and responsibilities set out in CPC-2-0-03. Protocols can include promoting the placement of antennas in optimal locations from a land-use point of view, or excluding certain lands and rooftops from protocol requirements. Through protocols, an LUA can highlight local knowledge and expertise related to area sensitivities, including local environmental or cultural impact and land-use compatibility. Protocols can recognize local amenities and planning priorities while expediting the planning and approvals necessary for the installation of radiocommunication and broadcasting antenna systems.

2.2 Use of Existing Infrastructures (Sharing)

The installation of a new antenna structure may at times evoke sensitivity by the local community. As such, Industry Canada requires proponents to use existing towers or infrastructure (such as rooftops, water towers, utility poles etc.). This is intended to minimize the proliferation of antenna systems. However, it is important to note that technical constraints (such as: the need to achieve certain radiocommunication coverage; frequency reuse; equipment isolation issues; etc.) may prevent a proponent from using an existing structure.

2.3 Preliminary Consultation

LUAs may wish to include in their protocols a mechanism for preliminary consultation. This would allow the proponent, before making any site selection decisions, to inform the LUA of its plans. Also, this initial contact allows a proponent to determine whether an LUA has a protocol in place regarding antenna system installations preferences. Within its own process, Industry Canada considers written formal contact as marking the official commencement of its 120-day consultation process between the LUA and the proponent.

With a protocol in place, this initial contact allows the LUA an excellent opportunity to quickly:

- inform the proponent of established and documented local requirements and consultation procedures;
- advise the proponent of historic and environmental land-use sensitivities;
- provide guidance and preferences to the proponent on the various possible areas and sites to be considered;
- indicate its preferences; and
- provide information concerning any aesthetic or landscaping preferences.

2.4 Involving Nearby Residents

Local public consultation offers a forum for residents located nearby to the proposed installation to make comments, ask questions or raise concerns relating to the proposed antenna system installation. This is an opportunity for local residents and the LUA to make the proponent aware of local considerations and, in so doing, influence the siting of the proposal.

Industry Canada's own process recognizes two possible public consultation scenarios:

1. The LUA can set the format of public consultation in their protocol. This could identify situations that require public consultation and those that specifically do not.

2. If an LUA's protocol is silent on the issue of public consultation, or if there is no protocol, then the proponent will be required to follow Industry Canada's default public consultation process

However, it is important to note that an LUA is in an ideal position when developing a public consultation process because of its local experience and knowledge. For this reason the Department encourages LUAs to include public consultation as part of their processes. The LUA, as the representative of the local community, can assist and guide proponents to conduct meaningful consultation by establishing reasonable and timely protocols which ensure local land-use concerns are appropriately addressed.

2.5 Responding to Consultation

Even in the case where the LUA does not have a local protocol, the LUA should take the opportunity established under Industry Canada's procedures to examine carefully the details of the proponent's proposal. During its examination of the proposal, an LUA may ask the proponent for additional information so as to determine whether there are any local land-use or public concerns. As part of the discussions, the LUA can engage the proponent by suggesting reasonable alternatives and/or mitigation measures that would address any questions, comments or concerns.

To maximize the benefit of this consultation process, both parties have to consider each other's requirements and constraints so they can work effectively together. In so doing, solutions can be reached that will minimize the impact of the proposed structure on the local surroundings, while at the same time take into consideration each other's interests.

2.6 Concluding Consultation

Industry Canada advises that an LUA's protocol should include a mechanism for issuing a formal concurrence to mark the end of the consultation with the proponent. This may take the form of a formal decision by a designated official, relevant committee or other formal means, such as town council minutes. If an LUA chooses such a mechanism as the issuance of a building permit as the means of concurrence, then the protocol should indicate this.

Where the proponent has met the public consultation requirements either through the LUA's or Industry Canada's default process and the LUA or the public does not formally communicate any concerns to the proponent about their proposal, Industry Canada will deem that the land-use authority and the public have no objections.

2.7 Impasse Negotiations - Dispute Resolution Process

When developing protocols, LUAs should consider the means by which disputes will be resolved, ensuring that they are appropriate for the local community. By documenting this process, all stakeholders will understand their roles and responsibilities as well as the process under which disputes will be resolved. Industry Canada generally favours a process whereby the proponent, the local public and the LUA work toward a solution which takes into consideration each other's interests. Where an LUA or a proponent feels it may be helpful to do so, it may engage Industry Canada in an effort to move the discussions forward. Under Industry Canada procedures, where either party (the LUA or proponent) believes that discussions have reached an impasse it can formally request departmental intervention

concerning a reasonable and relevant concern. It is anticipated that this will occur on very rare occasions.

LUAs may wish to consider incorporating alternate dispute resolution options into their protocols. Many alternate dispute resolution processes are interest-based rather than regulatory in nature. Therefore, the parties are more likely to find a mutually beneficial resolution.

2.8 A Timely Process

To avoid unnecessary delays, Industry Canada's process indicated that the LUAs are normally expected to conclude the consultation process within 120 days from the receipt of the formal consultation request. Accordingly, when developing protocols, LUAs should not exceed these timelines.

3. Local Protocol Guide Development

3.1 Protocol Principles

The following set of considerations and suggested principles may serve as a guide to LUAs developing protocols that respectfully balance local land-use interests with bringing enhanced wireless telecommunications services to the local community. The protocol should address the following:

- Information to proponents describing:
 - ▶ areas of historic or environmental importance to the community and the need to minimize the impact of the proposal on these areas; and
 - ▶ local preferences for antenna siting.
- Incentives to encourage aesthetically pleasing structures, to minimize their visual impact on the local surroundings.
- Exclusions which may build upon those established by Industry Canada (CPC-2-0-03, Section 6) but do not restrict them.
- Public consultation requirements which Industry Canada believes should be proportional to the proposal and its impact on the local surrounding. LUAs may wish to consider establishing a two-track process:
 - ▶ a streamlined concurrence process for proposals of little interest to the local community such as new sites in industrial areas, and
 - ▶ a process that includes broader public consultation for non-excluded structures likely to be of interest to the local community, such as, the construction of new towers.
- The protocol should establish a reasonable processing timeline for proposals submitted to the LUA for concurrence which respects the timelines established in CPC-2-0-03.

3.2 General Protocol Template

The following elements are provided to aid LUAs in developing protocols dealing with antenna system installations:

Objectives:

A short discussion on the overall objectives of the local protocol.

Jurisdiction:

A discussion of the LUA's responsibilities and obligations in safeguarding legitimate concerns regarding local land-use. Also, the role and responsibility of Industry Canada and the authority granted under the *Radiocommunication Act* to approve the location of radiocommunication facilities.

Consultation with the LUA:

This may include:

- criteria for excluding additional antenna systems, other than those listed in the CPC, from LUA consultation;
- list of all documents and drawings that the proponent must submit;
- processing and administrative fees;
- the means by which the LUA will indicate concurrence; and
- process time frames, that respect those established by CPC-2-0-03.

Excluded antenna structures (i.e. do not require consultation):

Industry Canada believes that not all antenna systems should be subject to a full land-use or public consultation process. Subjecting all antenna system proposals to the full consultation process would place an unnecessary and significant administrative burden on proponents, the LUA and the local public. Under Industry Canada's process, certain proposals are considered to have minimal impact on the local surroundings and so are excluded from public and land-use consultation. Industry Canada believes that consultation requirements should be proportional to the potential impact of the proposal, as viewed by the community. When establishing a local protocol, LUAs should consider the types of proposals that have minimal impact and so would warrant exemption from land-use and/or public consultation. It should be noted that any exclusion criteria established by the LUA can only augment those established under Industry Canada's Exclusion List (CPC-2-0-03, Section 6).

Antenna structures not excluded (i.e. subject to full consultation requirements):

LUAs may wish to consider the following when developing consultation protocols:

- for new structures exceeding a specified height, an LUA may identify preferred criteria for antenna structure siting;
- whether to encourage the placement of new towers in commercial, industrial/agricultural areas and utility or roadway easements;
- effect on significant natural or cultural features;
- landscaping, access control, fencing and road access; and
- whether to ask the proponent to suggest various options for consideration.

Public consultation:

Public consultation is an important part of the overall consultation process. Industry Canada believes that nearby residents should be consulted regarding non-excluded antenna proposals. Consultation allows the community to be involved and so ultimately influence the proposal's siting. Discussions can allow stakeholders to work towards a consensus. While LUAs are free to structure their public consultation process to meet their needs, Industry Canada's process consists of two distinct components:

- Public Notification - where the proponent informs the public of the proposed antenna system installation or modification, providing the necessary information needed to have a complete understanding of the proposal.
- Public Engagement - where the proponent engages the public and responds to all questions and comments, addressing all reasonable and relevant concerns. Public engagement may take various forms, from answering letters to hosting a public meeting or drop-in, depending on the community's level of interest.

Establishing appropriate time frames:

It is important that the protocol establishes time frames for the consultation process, to ensure timely response to any questions or concerns and to avoid unnecessary delays to the proponent and the LUA. Industry Canada expects that any time frames established within an LUA's protocol will respect those established by CPC-2-0-03.

Criteria not necessary to address through local protocols:

As described in Industry Canada's procedures (CPC-2-0-03, Section 7) proponents have specific obligations already subject to federal requirements. Protocols should not impose additional obligations in these areas. However, an LUA may wish to ask questions or seek clarification from proponents concerning their proposed steps and the alternatives available to satisfy these and any other radio authorization requirements. Proponents must comply with:

- Health Canada's public radio frequency exposure guidelines - Safety Code 6
- Radio Frequency Interference and Immunity - EMCAB2
- *Canadian Environmental Assessment Act* - CEAA
- Aeronautical Safety - Transport Canada and NAV CANADA requirements for aeronautical safety

4. Conclusion

LUAs, with their local knowledge, experience and leadership, have an important role in the consultation process relating to the siting of antenna structures. Clear and reasonable protocols will result in effective participation and cooperation between the LUA and the proponent. Such protocols can be used to identify the interests of residents and other community members as well as guiding land-use principles. Moreover, protocols allow for the introduction of new and enhanced wireless services in the local community in a timely manner. Protocols can assist proponents who are planning to install antenna-supporting structures, while at the same time give due consideration to local land-use issues.