

# MODEL STRATEGY FOR ANTENNA SYSTEMS

## LOCAL PLANNING COMMITTEE



Islands Trust



Photo Credit: Beacon Wireless – <http://www.beaconwireless.ca/#high-speed-internet>

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V A N H E M E R T & C O .

*Planning Healthy Communities*

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# 1 INTRODUCTION

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Local Trust Committees (LTC) have recently been grappling with how best to consult with the public and to address local concerns around proposed cellular and radio communication towers. At the same time Innovation Science and Economic Development Canada (ISED) notes that there is a growing demand for denser wireless connectivity by citizens generally, as well as students, public service providers including 911 services, and small business. While people enjoy the relatively remote Gulf Island life, it also means they need to have adequate wireless access, including emergency services. This is especially true for the aging population on the islands who require access to health care more often and may avail of e-health services in communities with limited specialized medical staff.

The model *protocol* within this document has been prepared to help Local Trust Areas (LTA) effectively and efficiently assess antenna system proposals within their own unique contexts. The document provides a description of ISED’s default public consultation process, a model public consultation *protocol*, model siting criteria, model Official Community Plan policies, and definitions. The model *protocol* may be adopted in its current form as a stand-alone document; or it may be customized for local considerations. The model siting criteria and the Official Community Plan policies may be incorporated into the *protocol* or included within an Official Community Plan. Existing processes and by-laws for each separate Local Trust Area should be reviewed in light of adopting the model *protocol* and be revised or rescinded.

The *protocol* has been developed with input and insight from Islands Trust planning staff, Local Trust Area Trustees, ISED, other land use authorities and representatives from the telecommunications industry. It should be noted, however, that input from the industry does not necessarily constitute support.

Note that words in *italics*, and not otherwise a document, legislative act or agency, are words defined in Section 7 Definitions.

## 2 INTERVIEWS AND REVIEW OF LITERATURE

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### 2.1 Introduction

The model consultation *protocol* is informed by the department of Innovation Science and Economic Development (ISED) Canada’s foundational guides, the Federation of Canadian Municipalities *protocol* template<sup>1</sup>, and Health Canada’s Safety Code 6 (2009) regarding limits to human exposure to radiofrequency electromagnetic fields. A discussion on the respective roles of federal government and local land use authorities sets the foundation for a defensible and effective *protocol*. Documents and telephone interviews with staff and a trustee served as an overview of the Islands Trust experience in reviewing antenna system proposals. This information provides a practical and experiential foundation of the local context. Rounding out the review, interviews were conducted with IEDC, other local government jurisdictions, and representatives of the telecommunications industry.

### 2.2 Local Trust Committee Jurisdiction and ISED’s Requirements and Recommendations

The ISED’s *Radiocommunication and Broadcasting Antenna Systems Client Protocol Circular CPC 2-0-03* (CPC) (hereinafter referred to as the CPC) is the foundation for understanding public consultation requirements and the appropriate role of the land use authority. It identifies the **mandate**, established in Section 5 of the *Radiocommunications Act* states that the Minister (of ISED) may, taking into account all matters considered relevant for ensuring the **orderly development** and **efficient** operation of radiocommunication in Canada, issue radio authorization, and approve each site on which radio apparatus, including *antenna systems*, may be located. A certain measure of flexibility is required in siting *antenna systems* in order to achieve adequate coverage for service areas.

The CPC emphasizes the importance of considering **local surroundings** in deploying *antenna systems*. Accordingly, the default public consultation process requires *proponents* of certain *antenna systems* to engage land-use authorities with regard to **site options, local public engagement and review processes, addressing reasonable and relevant concerns**, and ultimately obtain **land-use authority concurrence** in writing. Land-use authorities are encouraged to establish **reasonable, relevant, and predictable** consultation processes specific to *antenna systems* and consider matters such as designation of suitable contacts or responsible officials, proposal submission requirements, public consultation, documentation of concurrence process, and the establishment of milestones to ensure consultation process completion within 120 days. To that end, the ISED publishes the *Guide to Assist Land-use*

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<sup>1</sup> *Antenna System Siting Protocol* template published by the Federation of Canadian Municipalities in consultation with the telecommunications industry. Available online at [https://fcm.ca/Documents/reports/FCM/Antenna\\_System\\_Siting\\_Protocol\\_Template\\_EN.pdf](https://fcm.ca/Documents/reports/FCM/Antenna_System_Siting_Protocol_Template_EN.pdf) Accessed on October 2017.

*Authorities in Developing Antenna System Siting Protocols* which was referred to in developing this model strategy.

Certain types of proposals (listed below) are excluded from land-use authority and public consultation requirements; however, all *proponents* must consider whether or not it is prudent to undertake consultation for an excluded proposal on the basis of:

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

Exclusions include the following:

- new *antenna systems* where height is less than 15 metres, but does not apply to *antenna systems* proposed by telecommunications carriers, broadcasting undertakings or third-party tower owners;
- existing *antenna systems* where modifications are made, antenna 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;
- non-tower structure antenna on buildings, water towers, lamp posts, etc. may be excluded provided the height of the ground of the site of the non-tower structure, exclusive of appurtenances, is not increased by more than 25%; and
- temporary *antenna systems* used for special events or emergency operations.

The CPC provides examples of relevant concerns that may be raised during public consultation, including, for example, why use of existing *antenna systems* may not be used, alternative sites, and what is being done to integrate antenna into local surroundings. Concerns that are **not** relevant include disputes with members of the public relating to *proponent's* service, potential effects that proposed *antenna system* will have on property values or municipal taxes, and questions whether or not *Safety Code 6*, locally established by-laws, other legislation, procedures or processes are valid or should be reformed in some manner.

## 2.3 Islands Trust Experience

Information about Islands Trust experience was gleaned from special studies, staff reports and *protocol* documents from the following Local Trust Areas: Galiano Island, Gabriola Island, Hornby Island, and Salt Spring Island. Documents reviewed included:

- Local Planning Committee briefing of January 28, 2015
- Galiano Island LTA:
  - Rogers Cell Tower referral, April 24, 2015
  - Telecommunications Strategy staff report to LTC, March 30, 2016
  - Telecommunication Strategy Project staff report, March 27, 2017

- Antenna System and Siting Consultation Protocol, March 2017
- Hornby Island LTA--TELUS tower, public consultation package, staff reports of November 22, 2016 and May 5, 2017
- Gabriola Island LTA--Resolution GB-025-2010 regarding Communication Towers and Antennae
- Salt Spring Island:
  - Cellular Antennae Proposal Form
  - Procedural Guideline, April 26, 2001

Interviews for gaining insights and information were conducted with current and former Islands Trust planning staff with experience managing *antenna system* proposals. These included Marnie Eggen, Justine Starke, Aleksandra Brzozowski, and Robert Kojima. Tony Law, a trustee for Hornby Island LTA was also interviewed for his perspective on dealing with a particularly controversial application.

Additionally, to round out the perspective from other stakeholders, representatives from the telecommunication industry (Doug Anastos, TELUS) and their process consultant, Brian Gregg (SitePath), were interviewed. Industry input, however, does not necessarily mean support for the draft *protocol* as presented.

ISED representative, Jeff Stanhope, was interviewed and he also provided comments on a draft of the public consultation *protocol*. No red flags were raised regarding consistency with the CPC, the foundational guiding document of ISED.

Following an initial review of this protocol by the Local Planning Committee further input from the telecommunication Industry was received via a roundtable discussion in January of 2018. Representatives included Doug Anastos (TELUS), Kiersten Enemark (Shaw), and Samuel Sugita (Rogers Communications).

Experience in Other Jurisdictions included the following:

- Regional District of Nanaimo
- District of North Saanich
- District of Saanich
- District of Maple Ridge
- City of North Vancouver
- Village of Pemberton

## 3 MODEL CONSULTATION PROGRAM

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### 3.1 Information Science & Economic Development Canada (ISED) Application & Default Public Consultation Process

#### A. Description of ISED's Application and Default Public Consultation Process

ISED provides on its website a user-friendly text summary and infographic about how decisions are made regarding cell towers. The five-step process applies to all *telecommunication antenna systems* that are not expressly excluded from public consultation.

1. **Share**

Is a new tower necessary? Rules require companies to share towers, whenever possible, instead of building new ones.

2. **Propose**

Companies must submit a plan to the local municipality.

3. **Notify**

Once a company has a plan, it must notify local residents of the upcoming consultation. Rules require notifications be clearly marked – no confusion with junk mail. All residents within an area three times the height of the tower must be notified.

4. **Consult**

The company must consider the community's views.

Impasses are rare. <0.1% of cases require Industry Canada's decision.

5. **Build**

Following the consultation, and once the company and local municipality agree, the tower must be built within three years.

# CELL TOWERS IN YOUR COMMUNITY: HOW THE DECISION IS MADE

The Government of Canada regulates tower siting decisions, settles disputes, and sets health and safety standards.

New towers give wireless customers better, more reliable mobile service.

## 1 SHARE

Is a new tower necessary? Rules require companies to share towers, whenever possible, instead of building new ones

## 2 PROPOSE

Companies must submit a plan to the local municipality.

## 3 NOTIFY

Once a company has a plan, it must notify local residents of the upcoming consultation.

\* Rules require notifications be clearly marked – no confusion with junk mail. All residents within an area 3x the height of the tower must be notified.

## 4 CONSULT

The company must consider the community's views

\* Impasses are rare. <0.1% of cases require Industry Canada's decision.

## BUILD 5

Following the consultation, and once the company and local municipality agree, the tower must be built within three years.

*Proponents* of siting and constructing an *antenna system* are required to present their plans and consult with the local land use authority; they are not required to make a formal application to ISED for siting an antenna facility. They are required, however, to provide information and notify ISED at the following points in the process in order to proceed:

- **public notification**: provide notification package;
- **responding to the public**: copy of all public reply comments; and
- **concluding consultation**: if applicable--for example, in cases where a land use authority does not provide a clear form of land-use concurrence, --the *proponent* may request ISED to confirm its concurrence that the public consultation process requirements have been met.

The ISED Default Public Consultation Process applies to *proponents* if the land-use authority does not have its own established and documented consultation process for antenna siting. ISED's default process has three steps for consultation with the public and land-use authority whereby the *proponent*:

- provides **written public notification** of the proposed *antenna system* installation or modification;
- engages and **responds to the public** to address relevant questions, comments and concerns; and
- provides an opportunity for **public reply** in writing to the *proponent* regarding measures taken to address reasonable and relevant concerns.

Details on timing, content, communication channels, and style of communication for each step are summarized below.

### 1. *Public Notification*

- a) *Proponent* must provide a **notification package** to the following within a **radius of three times the tower height**:
  - the local public (including residences, community gathering areas, public institutions, schools, etc.);
  - neighbouring land-use authorities, and
  - businesses, and property owners.
- b) The notice of an upcoming consultation must be clearly marked, making reference to the proposed *antenna system*.
- c) Must provide at least **30 days** for written public comment.
- d) In areas of **seasonal residence**, the *proponent* must work with the land-use authority to determine the best manner to notify such residents to ensure their engagement.

- e) In addition, for *antenna system* of 30 metres or greater in height, notice must be placed in a local community newspaper circulating in the proposed area. Timing must be synchronized with the distribution of the public notification package, must be legible and placed in the public notice section of the newspaper. Further, it must include:
- description of proposed installation;
  - location and street address;
  - *proponent* contact information and mailing address; and
  - invitation to provide public comments to *proponent* within 30 days of the notice.
- f) In areas without a local newspaper, other effective means of public notification must be implemented.

## 2. *Responding to the Public*

*Proponents* must 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. When a question comment or concern is raised the *proponent* is required to:

- respond to the party in writing within **14 days** acknowledging receipt;
- address in writing all reasonable and relevant concerns within **60 days** of receipt or explain why concerns are not reasonable or relevant; and
- in written communication referred to above clearly note that the party has **21 days** from date of correspondence to reply to *proponent's* response.

The *proponent* may respond to a party via telephone, engaging in a community meeting or having an informal personal discussion.

## 3. *Public Reply Comments*

Examples of relevant concerns to address may include:

- Why is the use of an existing *antenna system* or structure not possible?
- How is the *proponent* trying to integrate the antenna into the local surroundings?
- What is the *proponent* doing to ensure that the *antenna system* is not accessible to the general public?
- What options are available to satisfy aeronautical obstruction making requirements at this site?
- What are the steps the *proponent* is taking to ensure compliance with the general requirements of the *Innovation Science Economic Development Canada's Client Procedures*

CPC 2-0-03, the *Canadian environmental Assessment Act* (CEAA), and *Safety Code 6* of the *Health Act*?

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 bylaws, other legislation, procedures or processes are valid or should be reformed in some manner.

#### 4. *Concluding Consultation*

Installation or modification of an *antenna system* may only be commenced after the consultation process has been completed by the land-use authority, or ISED confirms concurrence of the consultation portion of the default process, and after all other process requirements have been met by the *proponent*.

### **B. Analysis and Observations of ISED's Default Public Consultation Process**

#### 1. *ISED Limits of Public Consultation*

The limits of ISED's CPC include the following matters on which it is either silent or does not have a requirement:

- application requirements to the land use authority;
- cost recovery;
- pre-consultation; and
- a means for community based dialogue beyond providing public information.

Further, the time restrictions on notice, responses, as well as the overall consultation time frame could be restrictive in addressing controversial proposals and the efforts needed to mitigate and search for alternatives. In practice, however, some consultation takes longer than the timeframes set out in the Default process. Carriers appreciate a predictable process, but understand that certain sites may require more time.

#### 2. *Analysis*

The CPC clearly notes that its default consultation process is a **minimum** process and anticipates through direct reference that local land-use authorities may **augment** the process by developing its own *protocol* which can address, for example, notification of additional entities, expanded

minimum prescribed notification distances, pre-consultation meetings, and community information sessions.

The CPC also contains an important clause suggesting that even though a proposal may otherwise be exempt from public consultation, there are cases where "it may be prudent for the *proponent* to consult even though the proposal meets an exclusion." Considerations for this decision include:

- 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; and
- NAV Canada and Transport Canada's marking and lighting requirements for the proposed structure.

The companion *Guide to Assist Land-Use Authorities in Developing Antenna Siting Protocols* complements the CPC and addresses the role *land use authorities* (LUA)s can play in effectively participating and influencing decisions with respect to the proposed *antenna system* within the ISED's siting procedures and sets out elements that LUAs might wish to include in establishing their own local *protocol*. These elements are incorporated in the model *protocol* described in this document.

*Local knowledge* is valued, particularly with regard to amenities, cultural or environmental sensitivities, Local Trust Area planning priorities such as those related to telecommunication connectivity, and other relevant characteristics of the area.

Although recognizing that the LUA or public's preferred locations for siting may not always be feasible for strategic and technical reasons, the guide notes:

*LUAs are encouraged to develop protocols that are clear and within their area of responsibility. Protocols can include promoting the placement of antennas in optimal locations from a land-use point of view, or excluding certain types of installations from protocol requirements. Through protocols, an LUA can highlight its local knowledge and expertise related to area sensitivities, including environmental or cultural concerns, and land-use compatibility.<sup>2</sup>*

It is appropriate, therefore, for a local government to establish by way of policy in its Official Community Plan or Land Use Bylaw, and a *protocol* document, land use preferences, land use

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<sup>2</sup> Guide to Assist Land-use Authorities in Developing antenna system Siting Protocols, Industry Canada (now Innovation, Science, Economic Development Canada), Issue 2, August 2014, Section 2.1, page 3.

sensitivities, and *design guidelines*. for siting of an *antenna system*. This conclusion has been confirmed in a conversation with an ISED representative.<sup>3</sup>

The guide suggests LUAs may consider preliminary consultation which will serve to inform, advise, guide, and indicate preferences to *proponents*. Communities such as the Regional District of Nanaimo have established a preliminary consultation step in the form of a site investigation meeting.

Further, the guide acknowledges that a LUA can set the format for public consultation in its *protocol*. These formats may take the form of a community open house, town hall style meeting, or another format preferred by the LUA. Ideally, the LUA and *proponent* will arrive at a mutually agreeable format.

In its outline template, the guide provides a set of considerations and suggested principles for a community in developing its own local *protocol*. The Regional District of Nanaimo, for example, has used this template effectively for establishing a *protocol* for all its Electoral Areas.

### **C. Addressing the Limitations of the ISED's Default Process**

A model *protocol* for the Local Trust Areas can effectively compliment and address the inherent limitations of ISED's default process in the following manner:

- specify application requirements in detail;
- require pre-consultation;
- require information to the Local Trust Area, even if public consultation is not required;
- address cost recovery separately through an application fee;
- establish the desired format for public consultation beyond information packages;
- increase written notification area;
- identify specific groups to notify;
- establish siting criteria via OCP policy or via incorporation within a separate *protocol* document; and
- establish its own time frames, provided they do not exceed limitations of the CPC; however, the CPC provides for an opportunity to extend time frames under certain circumstances, particularly if there is an opportunity to mitigate and review options.

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<sup>3</sup> Conversation with Jeff Stanhope, Spectrums Operations Manager, Spectrum Management Operations Branch, ISED, September 29, 2017.

## 3.2 Model Public Consultation Protocol for Local Trust Areas

### A. Introduction

Telecommunications systems that provide full coverage and service are essential to for a healthy and well-connected community. This protocol serves as a foundation to ensure that communities benefit from high quality, dependable telecommunication services that effectively support daily life activities, emergency services, citizen engagement, tourism, and local business all of which are important to the Islands Trust.

### B. Objectives

The objectives of this *protocol* are:

1. to acknowledge that ISED has exclusive jurisdiction over the approval of the siting and installation of telecommunication infrastructure in Canada;
2. to establish a siting and consultation process for use by all Local Trust Areas (LTA)s that is harmonized with ISED's *Radiocommunication and Broadcasting Antenna Systems Client Procedures Circular (CPC-2-0-03)* and *Guide to Assist Land-use Authorities in Developing Antenna Siting Protocols* for reviewing land use issues associated with *antenna system* siting proposals;
3. to set out an objective process, criteria and guidelines that are transparent, consistent and predictable for the evaluation of *antenna system* siting proposals that:
  - minimize the number of new antenna sites by encouraging co-location;
  - encourage designs that integrate with the surrounding land use and public realm;
  - establish when local public consultation is required; and
  - allow ISED and *proponents* to identify and resolve any potential land use, siting or design concerns with the LTA at an early stage in the process.
4. to provide an expeditious review process for *antenna system* siting proposals;
5. to establish a local land use consultation framework that ensures the LTA and members of the public contribute local knowledge that facilitates and influences the siting--location, development and design (including aesthetics) --of *Antenna system* within LTA boundaries;
6. to contribute to the orderly development and efficient operation of a reliable, strong radiocommunication network within all LTAs;
7. to provide LTAs with the information required to satisfy the requirements of ISED regarding local land use consultation, resulting in an informed statement of concurrence, concurrence with conditions, or non-concurrence from the LTA at the end of the process; and

8. to establish administrative fees to be paid by telecommunication *proponents* with consideration given to the costs to Islands Trust to evaluate and process proposals.

### **C. Jurisdiction**

#### **1. Role of Innovation, Science and Economic Development Canada**

Under the *Radiocommunication Act*, the Minister of ISED has sole jurisdiction over inter-provincial and international communication facilities. The final decision to approve and license the location of *telecommunication antenna system* is made only by ISED. All technical aspects and siting of telecommunication and broadcasting services are regulated by the Federal government under the *Radiocommunication Act*. ISED has an established procedure, the *CPC*, which prescribes the process and review of proposed telecommunication structures. As part of the process, *proponents* are required to notify the local land-use authority and nearby residents. Moreover, the *proponent* is required to address the public's questions, concerns and comments through ISED's prescribed public consultation process.

#### **2. Other Federal Legislation**

##### **Public Health**

With regard to public health, ISED refers to the standards set by Health Canada for determining acceptable levels of radiofrequency electromagnetic energy produced by telecommunication infrastructure. All telecommunication *proponents* are required to follow the guidelines outlined in Health Canada's *Safety Limits of Human Exposure to Radiofrequency Electromagnetic Fields in the Frequency Range from 3 kHz to 300 GHz – Safety Code 6 (2009)*.<sup>4</sup> This code is accompanied by the *Technical Guide for Interpretation and Compliance Assessment of Health Canada's Radiofrequency Exposure Guidelines*, to assist users in understanding and assessing the safety of electromagnetic exposures in working and living environments. This code is also accompanied by a fact sheet, *What is Safety Code 6?* (available online at <https://www.canada.ca/en/health-canada/services/environmental-workplace-health/reports-publications/radiation/fact-sheet-what-safety-code-6.html>). The document is self described as 'busting myths' with a summary of facts. The introduction to this document, cited in the following paragraphs, provides a clear summary.

*The Government of Canada is committed to protecting the health and safety of Canadians from environmental risks, including those posed by exposure to radiofrequency (RF)*

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<sup>4</sup> LTAs do not assess any submission for an Antenna System with respect to health and radiofrequency exposure issues or any other non-placement or non-design related issues. Any questions or comments the public may wish to make regarding health issues related to cell phones, cell towers and radiofrequency exposure guidelines (Safety Code 6) should be directed to Health Canada on-line at [healthcanada.gc.ca](http://healthcanada.gc.ca) and to the *proponent's* representative. The document is available online at <https://www.canada.ca/en/health-canada/services/environmental-workplace-health/consultations/limits-human-exposure-radiofrequency-electromagnetic-energy-frequency-range-3-300.html> ( accessed October 27, 2017).

*electromagnetic energy - the kind of energy given off by various electronic devices such as cell phones and Wi-Fi, as well as broadcasting and cell phone towers.*

*Health Canada has a guideline, known as Safety Code 6, which recommends limits for safe human exposure to RF electromagnetic energy. The limits established in Safety Code 6 incorporate large safety margins to provide a significant level of protection for all Canadians, including those working near RF sources.*

*Health Canada scientists monitor the scientific literature on this issue on an ongoing basis. Safety Code 6 is reviewed on a regular basis to verify that the guideline provides protection against all known potentially harmful health effects.*

*While Health Canada recommends limits for safe human exposure, Health Canada does not regulate the general public's exposure to electromagnetic RF energy. However, many provinces and territories apply the exposure limits in Safety Code 6 for general public exposure. Wireless devices and their associated infrastructure (such as cell towers) are regulated by Industry Canada, and are required to comply with Safety Code 6.*

*Canada's limits are consistent with the science-based standards used in other parts of the world (e.g., the United States, the European Union, Japan, Australia and New Zealand) and provide protection against all known adverse health effects from RF energy.*

### **Environmental and Aeronautical Legislation**

In addition to Health Canada's requirements, *proponents* must comply with the Canadian Environmental Assessment Act and any painting and lighting requirements for aeronautical safety prescribed by NAV Canada and Transport Canada.

### **3. Role of Local Government**

Local governments are referred applications for proposed towers and are given the opportunity to comment on the proposal. Ultimately, the role of the Local Trust Committee (LTC) is to issue a statement of concurrence or non-concurrence to the *proponent* and ISED.<sup>5</sup> The statement considers the land-use compatibility of the antenna structure, the responses of the impacted residents and the *proponent's* adherence to this *protocol*. In addition, local government can communicate and provide guidance to the *proponent* on the particular sensitivities, planning priorities, and characteristics of an area, and establish siting guidelines. Local government may adopt the default public consultation process as defined in ISED's CPC or augment the process with its own consultation process, subject to the time limitations established in the CPC.

### **D. Antenna Structures for which Public Consultation is Required**

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<sup>5</sup> Regardless of whether the LTA issues a statement of concurrence or non-concurrence, ISED has exclusive jurisdiction over the approval of the siting and installation of telecommunication infrastructure in Canada.

- **New antenna systems:** where the height is greater than 15 metres
- **New antenna systems:** where the height is less than 15 metres proposed by telecommunication carriers, broadcasting undertakings or third-party owners
- **Existing antenna systems:** where modifications exceed a cumulative height increase of greater than 25%
- **Non-Tower Structures:** where the height above ground of the non-tower structure, exclusive of appurtenances, is increased by more than 25%

## E. Excluded Antenna Structures & Information Requirements

This section outlines the criteria for identifying *Antenna system* excluded from the consultation process by ISED, the need to consider local circumstances for all exempt structures, and the process for *proponents* to notify and discuss proposed exempt structures with the LTA.

### 1. Exemptions from Antenna System Siting Proposal Review and Public Consultation

For the following types of installations, *proponents* are generally excluded by ISED from the requirement to consult with the LTA and the public, **but must still fulfill the General Requirements outlined in Section 7 of the CPC.**

- **New antenna system:** where the height is **less than 15 metres** above ground level proposed by business, government, Crown agencies, general public; this exclusion does not apply to *antenna system* proposed by telecommunications carriers, broadcasting undertakings or third-party tower owners;
- **Existing antenna system:** where modifications are made, antennas added or the tower replaced<sup>6</sup>, 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<sup>7</sup>. No increase in height may occur within one year of completion of the initial construction. This exclusion does not apply to *antenna system* 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 structure:** antennas on buildings, water towers, lamp posts, and similar structures, **are excluded** from consultation provided that the height above ground of the non-tower structure, exclusive of appurtenances, is not increased by more than 25% and have been reviewed by Islands Trust staff who will provide comment in accordance with LTA *design guidelines*; and
- **Temporary antenna systems:** used for special events or emergency operations and 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*

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<sup>6</sup> The exclusion for the replacement of existing antenna systems applies to replacements that are similar to the original design and location.

<sup>7</sup> Initial antenna system installation refers to the system as it was first consulted on, or installed.

## 2. *Design Guidelines for Antenna Systems*

The appendix in Chapter 8 of this protocol document is a matrix of telecommunication design illustrating typical tower designs, rooftop antennas, utility poles and light standards. An LTA may choose to further exempt from public consultation any of the specific antenna systems illustrated in the matrix. Note that antennas affixed to buildings, utility poles and light standard are already exempt from public consultation, unless they exceed a 25% increase in height.

## 3. *Voluntary Public Consultation*

The CPC states that:

*Individual circumstances vary with each antenna system installation and modification, and the exclusion criteria above should be applied in consideration of local circumstances. Consequently, it may be prudent for the proponents to consult the LTA and the public even though the proposal meets an exclusion noted above.*

Therefore, when applying the criteria for exclusion, *proponents* are encouraged to consult the LTA when it is **prudent** to do so in consideration of any of the following:

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

## **F. Notification and LTA Review of Exempt Antenna system**

Notwithstanding ISED's exemption criteria for certain *Antenna system*, LTAs should be informed of all new *antenna system* installations within their boundaries so they can:

- be prepared to respond to public inquiries once construction/installation has begun;
- be aware of site *co-location* within the LTA;
- maintain records to refer to in the event of future modifications and additions; and
- engage in meaningful dialogue with the *proponent* with respect to the appearance of the *antenna system* and structure prior to the *proponent* confirming a final design.

Therefore, *proponents* are required to undertake the following steps for **all exempt antenna system installations before commencing construction**.

### 1. *Building/Structure-Mounted Antenna System:*

The *proponent* will in all cases provide the following **information** for all new *antenna system* or modifications<sup>8</sup> to existing *antenna system* that are mounted to an existing structure, including (but not limited to) a building/rooftop, water tower, utility pole or light standard, and which are exempted from public consultation in sub-section 3.2 D. 1.:

- a) the location of the *antenna system* (address, name of building, rooftop or wall mounted);
- b) description of proposed **design** with respect to the measures used by existing systems on that site;
- c) the height of the *antenna system*;
- d) the height of any modifications to existing systems.

The Islands Trust staff may notify the *proponent* of any inconsistency with the preferences and sensitivities expressed in the siting criteria and /or design preferences and the parties (proponent and Islands Trust staff) will work towards a solution that minimizes visibility.

### 2. *Additions that Increase the Height of Freestanding Antenna system:*

The *proponent* will confirm to the LTA that an addition that extends the height of an existing *freestanding antenna system* meets the exclusion criteria in subsections 3.2 D. 1 by providing the following:

- a) the location, including its address and location on the lot or structure;
- b) a short summary of the proposed addition including a preliminary set of drawings or visual rendering of the proposed system; and
- c) a description of how the proposal meets one or more of the Article 3.2 D. 1 exclusion criteria.

The Islands Trust staff will review the documentation and will contact the *proponent* where there is a site-specific basis for modifying the exemption criteria based on the siting criteria preferences and discouragements expressed of the *protocol*. In such cases, the Islands Trust staff and the *proponent* will work toward a mutually agreeable solution, which may include the Islands Trust staff requesting the proposal be subject to all or part of the pre-consultation, proposal submission and public consultation process defined in Subsections F. 2. a) b) and F. 2. of this *protocol*, as applicable, concluding with a letter of concurrence or non-concurrence.

### 3. *Additional Exemptions*

Local Trust Areas may exclude from all or part of the consultation process any *antenna system* installation in addition to ISED's basic exemptions listed in articles 3.2 B. 1. & 3.

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<sup>8</sup> Providing information is required for modifications that materially or noticeably change the appearance of the system. Maintenance works that do not result in such changes are excluded from the information requirement.

- a) A new *antenna system* proposed to be located outside the LTA's preferred distance from the nearest lot line;
- b) Notwithstanding Subsection E. 1. Building/ Structure Mounted Antenna System, the Islands Trust staff may additionally, on a case-by-case basis, exempt a *proponent* from all or part of the consultation requirements under Section F of this *protocol*.<sup>9</sup> For example, exemptions may be granted where the proposed location is separated from a *residential area* or heritage area or structure by an arterial roadway, and/or is buffered by substantial tree cover, topography, or buildings.
- c) Antenna system greater than 15 metres in height proposed by government agencies such as police, fire protection, ambulance, other emergency services, BC ferries, and BC Hydro who maintain their own two-way telecommunication networks, except, however, such systems are not exempt if they are proposed in partnership with a commercial telecommunication service provider.

## **G. Consultation Process**

### **1. Consultation Objectives**

The *protocol* for public consultation is designed to:

- inform;
- incorporate local knowledge;
- harmonize with ISED regulations and guidelines;
- be transparent;
- be consistent;
- be predictable; and
- be expeditious.

### **2. Process Steps, Requirements and Time lines**

#### **a) Pre-Consultation with the LTA**

##### *Commentary*

*For free-standing towers, pre-consultation is one of the most important elements in the antenna siting process as it generally occurs at a point before the proponent is committed to a site or design.*

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<sup>9</sup> For example, a LTA may decide to exclude certain proposals from the requirement to hold a public meeting, but not from issuing a public notification to affected property owners/tenants within the *Prescribed Notification Distance*.

*As a result, it represents the best opportunity to influence the siting decision since the proponent will more likely become committed to a site once the detailed engineering has been completed. While a discussion of submission requirements is appropriate, the proposal will benefit most from early direction on matters of siting and design. Proponents are strongly encouraged to initiate pre-consultation as early as possible in the antenna siting process for exempt and non-exempt structures. The process of building a good working relationship with telecommunication providers may begin even before a proposal is considered: Local Trust Areas are encouraged to invite potential proponents for a conversation about telecommunication at any time, the earlier the better.*

Prior to submitting an *antenna system* proposal that does not meet any of the exemptions listed in Subsection D. 1. 3. the *proponent* will undertake the following preliminary consultations with the LTA:

### **Step 1: Pre-Consultation**

#### *i. Pre-Consultation*

*The purpose of the pre-consultation phase is for the proponent to share with the LTA representative the network objectives, provide possible site options and receive preliminary feedback. The pre-consultation steps include:*

- the *proponent* notifies the LTA representative that locations in the community are being assessed for potential *antenna system* siting;
- the proponent provides the LTA representative potential locations and invites feedback on preferred locations and/or designs; and
- the proponent may offer to host a community workshop to provide options and invite feedback on possible solutions, although not necessary.

#### *ii. Site Investigation Meeting*

Based on comments from the pre-consultation step, the proponent will provide a summary of a site-specific location, including:

- **Site Location:** location, type and height of the proposed *telecommunication antenna system*;
- **Alternative Locations:** summary of what other alternative locations were considered, including options to co-locate on existing structures;
- **Site Design:** preliminary drawings and/or visual renderings of the proposed *telecommunication antenna system*;
- **Co-location:** summary of efforts proponent has made to allow other companies to co-locate on the tower, as well as indication from other companies regarding interest in co-locating on new telecommunications structure.

The purpose of the site investigation meeting is to:

- identify preliminary issues of concern;
- give opportunity for the *proponent* to outline the proposal to the LTA;
- give opportunity for the LTA to provide initial feedback to the *proponent*;
- identify any potential *sensitive community locations* as defined by this policy;
- identify any potential *neighbouring land-use jurisdictions, school districts, emergency service providers and community associations* that may be required to provide comment on the proposal as outlined in this policy;
- guide the proponent on creating *localized content* for public notification and distribution; and
- Inform the *proponent* of the LTA's preference of taller towers over shorter towers and supporting future *Co-location* opportunities.

iii. *LTA Preferences and Requirements*

Following the Site Investigation Meeting, planning staff will provide the proponent with an information package within a timeframe determined by the Islands Trust that includes:

- **Public consultation:** confirmation if, (a) public consultation is required, and if so, the process the proponent needs to follow, including a list of any other agencies, jurisdictions, and First Nations to be consulted, and if a Public Information Meeting is required or, (b) public consultation is not required;
- **Site design:** comments on proposed location and design; and
- **Studies and permits:** a list of plans, studies and/or permits that may be required (i.e. environmental impact statements) as well as any fees that need to be paid to the LTA for processing application.

**Step 2: Application**

b) *Application Submission to the LTA: Initial Application Proposal*

Except for specific waivers granted for amateur operators (see Subsection 3) the *proponent* must include the following information when submitting a *telecommunication antenna system* siting proposal to the LTA that does not meet the exemption criteria for the proposal review and public consultation requirement:

- i. **Site Rationale:** a letter or report from the *proponent* indicating the need for the proposed site, the rationale for site selection, and a summary of opportunities for *co-location* potentials on existing or proposed *antenna system* within the LTA;

- ii. **Co-location:** (a) a summary of effort proponent has made to encourage others to co-locate on the proposed new infrastructure, as well as a list of parties who have expressed an interest in co-locating, and (b) a written and signed attestation that there are no *co-location* opportunities within the LTA;
- iii. **Site Design:** Preliminary engineering plans of the proposed structure which includes information outlining the number of antennas proposed on the structure, and the structure's ability to accommodate future antennas (including *co-location*). Proponents are encouraged to provide site design options;
- iv. **Visual Renderings:** visual rendering(s) of the proposed *antenna system* with best effort to superimpose to scale;
- v. **Site Plan:** a site plan showing the proposed development situated on the site;
- vi. **Site Distance to Surrounding Areas:** a map showing the horizontal distance between the proposed antenna system and the nearest residential, commercial and institutional uses;
- vii. **Letter of Authorization:** confirmation of legal ownership of the lands subject to the proposal, or a signed letter of authorization from the registered property owner of the land, their agent or other person(s) having legal or equitable interest in the land;
- viii. **Title Search:** a copy of a title search (dated within the past 30 days of proposal submission) and any restrictions, restrictive covenants, easements or rights-of-way registered against the lands the *telecommunication antenna system* is proposed on;
- ix. **Safety Code 6:** a written and signed attestation that the *telecommunication antenna system* will respect Health Canada's *Safety Code 6* which sets safe radiofrequency emission levels for these devices including the cumulative effects of multiple *telecommunication antenna system* at the location and in the immediate area;
- x. **Supplemental Documentation:** any other documentation as reasonably identified by the LTC following the site investigation meeting; and
- xi. **Fee:** the application fee as required by Local Trust Area Bylaw No. \_\_\_\_.
- xii. **Draft Notification:** Based on required consultation process as directed by LTA, the proponent is to provide, (a) a draft of all public notices to be delivered by mail to the public, *School Districts*, *community associations* and *neighbouring land-use jurisdictions*, which is to be approved by LTA staff prior to mail out; (b) an address list and map indicating all properties **and residents** which are to be notified by mail of the proposal, (c) a draft of newspaper advertisements indicating the time and date of any public information meeting, which is to be reviewed by LTA staff prior to publication (if a public information meeting is required); and
- xiii. **Comments from Emergency Services:** a copy of written correspondence indicating that the *proponent* has referred the proposal to local fire, police and ambulance

services, and if given, any comments received emergency services should be submitted to LTA staff prior to mail out.

### 3. *Waivers to Application Submissions*

- ⊕ The LTA may waive any of the Initial Application or Public Notification requirements for amateur radio operators on a case by case basis.

#### **Step 3: Public Consultation**

In addition to ISED's public consultation requirements as prescribed in *Radiocommunication and Broadcasting Antenna Systems Client Procedures Circular (CPC-2-0-03)*, the LTA has incorporated into the requirements a number of **augmentations** to the public consultation process. Itemization of the augmented elements may be found in Table A: "Consultation and Information –Process Steps and Requirements: ISECD & Augmentation."

#### a) *Notification Requirements for Non-exempt Antenna Systems*

- i. The *proponent* will provide written notice, sent by regular mail or hand delivered, to all property owners and residents with a *notification distance* of 10 metres for every one metre in height from the base of the structure for a *freestanding antenna system*
- ii. The *proponent* will provide written notice, sent by regular mail or hand delivered, to all *neighbouring land-use jurisdictions, emergency service providers and school districts* with a *notification distance* of 1000 metres from the base of the structure.
- iii. The *proponent* will provide notice to ISED's regional office.
- iv. The *proponent* will provide written notification to Community Associations identified at the site investigation meeting.
- v. The proponent will place notice of the *telecommunication antenna system* proposal in at least two editions of a local newspaper.
- vi. Where a public information meeting is to be held for a proposed *telecommunication antenna system*, a notice of the meeting shall be placed in at least two editions of a local newspaper and the proponent will provide written notice of the meeting sent by regular mail or hand delivered, to all property owners, *land-use jurisdictions, emergency service providers and school districts* with a *notification distance* of 10 metres for every one metre in height for a *freestanding antenna system* and for a *building/structure-mounted antenna system*.

#### b) *Notice Content Requirements*<sup>10</sup>

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<sup>10</sup> These requirements are those of Appendix 1 of the CPC as well as additional requirements suitable for the Islands Trust.

The *proponent* shall include at a minimum the following information in any mailed or otherwise delivered public notice:

- i. 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;
- ii. Information on the location within the community, the geographic coordinates and the specific property or rooftop, height, type, design and colour of the proposed telecommunication antenna system, including a copy of the site plan submitted with the application;
- iii. Description of the antenna that may be mounted on the supporting structure and simulated images of the proposal;
- iv. Identification of areas accessible to the general public and the access/demarcation measures to control public access;
- v. 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;
- vi. An attestation that the installation will respect good engineering practices including structural adequacy;
- vii. Transport Canada's aeronautical obstruction marking 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;
- viii. Information on the environmental status of the project, including any requirements under the Canadian Environmental Assessment Act, 2012;
- ix. Clear information on the role of ISED as the sole approving authority for the siting of telecommunication Antenna system and that the LTA only provides a statement of siting concurrence/non-concurrence at the request of the proponent;
- x. Notice that general information relating to antenna systems is available on ISED Canada's Spectrum Management and Telecommunications website (<http://www.ic.gc.ca/towers>);
- xi. Reference to any applicable local land-use requirements such as local processes, protocols, etc.;
- xii. Information that comments and responses should be directed to the proponent and that all submissions received by the proponent will be forwarded to the LTA for their records;
- xiii. Information that citizens may request their name and contact information be kept confidential within the published records;

- xiv. The name and contact information of a contact person for the *proponent*;
- xv. The name and contact information of ISED;
- xvi. The name and contact information of the LTAs planner;
- xvii. An attestation that the *telecommunication antenna system* will respect Health Canada's *Safety Code 6* which sets safe radiofrequency emission levels for these devices; and
- xviii. The date, time and location of the public information meeting where required.
- xix. closing date for submission of written public comments (not less than 30 days from receipt of notification).
- xx. The notification shall be sent in an envelope addressed to the "Occupant" and/or "Tenants" and shall clearly show in bold type on the face of the envelope the statement: "NOTICE FOR RESIDENTS: NEW PROPOSED CELL TOWER - INFORMATION IS ENCLOSED."

#### 5. *Public Information Session*

The LTA requests the *proponent* chair a public information meeting for all proposed *telecommunication Antenna system* exceeding 15 metres in height **or where there is significant public interest in the new free standing proposed telecommunication antenna system**. The type of public meeting to be conducted is up to the discretion of the proponent, however:

- an appropriate date, time and location for the public information meeting will be determined in consultation with the LTA's Island Planner;
- the *proponent* will make available at the public information meeting an appropriate visual display of the proposal, including a copy of the site plan submitted with the application and an aerial photograph of the proposed site;
- all information and materials presented should consist of *localized content*;
- the *proponent* shall not schedule a public information meeting less than seven day prior to the close of the public consultation period; and
- the *proponent* may request LTA staff attendance and participation in the meeting.

#### 6. *Online Community Engagement*

- A proponent may augment the public information session with an online forum to allow information sharing and feedback from people who may not be able to attend a public forum

<b>Table A: Consultation and Information –Process Steps and Requirements: ISED &amp; Augmentation</b>		
<b>Step</b>	<b>Default ISED Requirement</b>	<b>LTA Augmentation</b>
<b>Pre-consultation</b>		
Informal meetings	None	Yes
Information about exempt antenna systems	None	Yes
Notification	None	Yes
Site investigation meeting	None	In some cases
Confirmation of LTA preferences and requirements	None	Yes
<b>Application</b>		
Initial application proposal	None	Yes
Submission Prior to Notification –for staff review and approval	None	<ul style="list-style-type: none"> <li>○ Draft of all public notices</li> <li>○ Address list and map of all property owners and residents to be notified</li> <li>○ Draft of newspaper ads</li> <li>○ Copy of written notice referencing emergency services providers referral comments</li> </ul>
<b>Public Consultation</b>		
Written notice	Property owners within 3 X tower height prescribed distance	<ul style="list-style-type: none"> <li>○ Include property owners and all residents, including seasonal residents</li> </ul>
	Neighbouring land use jurisdictions, emergency service providers, and school districts within 3 X tower or building/ structure height	<ul style="list-style-type: none"> <li>○ Community associations</li> </ul>
Newspaper notice	Notice regarding proposal in one edition of a local newspaper	<ul style="list-style-type: none"> <li>○ Proposal and information meeting</li> <li>○ Optional community workshop</li> <li>○ Two editions of local newspaper</li> <li>○ Website and/or social media notification</li> <li>○ Optional online forum</li> </ul>
Notice content	12 points of the CPC Appendix 1 ‘Public Notification Package’	<ul style="list-style-type: none"> <li>○ Site plan</li> <li>○ Statement on respective roles of ISED and LTA</li> </ul>
Public information session	None	<ul style="list-style-type: none"> <li>○ For all proposals exceeding 15 m in height or where there is significant public interest</li> </ul>

## 7. **Step 4: Request for Concurrence**

### a) *Submission to the LTA: Request for Concurrence*

Prior to submitting a formal request for siting concurrence, the proponent must include the following information to the LTA:

- i. A summary of and a copy of all public submissions and responses, as well as the proponent's response to public submissions as outlined in ISED's *Radiocommunication and Broadcasting Antenna Systems Client Procedures Circular* (CPC-2-0-03);
- ii. A letter outlining any NAV Canada and Transport Canada requirements for lighting and painting on the proposed *telecommunication antenna system*;
- iii. A copy of all plans and studies (i.e. Environmental Review) required for the construction of the proposed *telecommunication antenna system*;
- iv. A package summarizing the results of the public information meeting containing at a minimum, the following:
  - The time, date, location and number of people in attendance of any public information meeting held;
  - A List of attendees, including names, addresses and phone numbers (where provided voluntarily);
  - Copies of all letters and other written communications received; and
  - A letter outlining how all the concerns and issues raised by the public were addressed.

### b) *Statement of Concurrence or Non-concurrence*

#### **Commentary**

*The purpose of this protocol is to provide the LTC with consistent procedures and information with which to evaluate the siting of a telecommunication antenna system. Following the commencement of the consultation period, the proponent may request a statement of concurrence from the LTC. Once a request is received, Islands Trust staff will prepare a report with a recommendation to the LTC. The staff report will include information on the proposed telecommunication antenna system, a site plan, the location of the proposal, an overview of the application and all public consultation materials submitted by the proponent for the Committee's review. It is the discretion of the LTC to provide a statement of siting concurrence or non-concurrence or- The proponent can ask for a decision from the LTC. If nothing is forthcoming, after a certain amount of time, they can ask ISED what to do next. Should a proposal ever go to impasse (rare), ISED will look at the default process as a minimum and also consider the LTC's protocol. In reaching a decision*

*the ISED will consider such questions as 'Did the proponent address all requirements?', 'Did the proponent adequately address all reasonable and relevant concerns?' and 'Can the proponent argue that the LTC's process was overly onerous and unrealistic?'*

The statement of concurrence or non-concurrence shall occur within 120 days of acceptance of a complete application, unless otherwise agreed to by the proponent and ISED.

*c) Duration of Concurrence*

- i. Concurrence remains in effect for a maximum period of 3 years from the date it was issued by the LTC. If construction has not commenced within this time period, the concurrence expires and a new submission and review process, including public consultation as applicable, is necessary prior to any construction activity.
- ii. Request notification of intent to construct 60 days prior commencement of construction activity (OR, building permit).
- iii. Once concurrence has been issued, it may be transferred from the original proponent to another proponent without the need for further consultation provided that:
  - All information gathered by the original *proponent* is transferred to the new *proponent*;
  - The structure and *antenna system* for which the concurrence was issued to the original *proponent* is what the new *proponent* builds, and
  - Construction of the structure is begun within the duration of the concurrence period.

*d) Letter of Undertaking*

The Proponent may be required by the LTC to provide a Letter of Undertaking which may include the following requirements:

- i. posting of a security for the construction of any proposed fencing, screening or landscaping or
- ii. building permit requirements determined by the regulations of the \_\_\_\_\_Regional District.

**H. Terms of Use of This Policy**

The LTA is not in any way bound by this policy and is free to apply, or not apply, any evaluation criterion it deems appropriate in its consideration of applications.

## 4 LAND USE SITING CRITERIA

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### 4.1 Introduction

*Antenna systems* should be sited and designed to respect local sensitivities and preferences as identified by the LTA, including making efforts to being unobtrusive and inconspicuous, minimizing visual impact, avoiding disturbance to natural features and reduce the need for future facilities in the same area, where appropriate.

#### *Commentary*

*An outright ban on any type of antenna system is not defensible and may ultimately not be in the LTA's best interest as the ISED has the ultimate approval authority; better to have a progressive policy that recognizes telecommunication antenna systems need to go "somewhere" and use siting criteria to help proponents find the "least worst" spot. Siting criteria puts the LTA in a position of having some control, rather than being ultimately powerless.*

These criteria address co-location, re-use, use of existing infrastructure, and new *antenna systems*.

Consideration is requested in the following order of priority:

1. **Co-location** on an existing Antenna System
2. **Re-use** of an existing telecommunication facility
3. Use of **existing infrastructure** such as a building rooftop or utility pole
4. **Stealth design** of a new antenna system
5. **New antenna system** structure

The proponent should review the guidelines identified below as early as possible and should attempt to resolve any outstanding issues prior to submitting its *antenna system* siting proposal and undertaking the public consultation, where required by the LTC. Because expressed preferences may be location or site specific, the proponent is encouraged to discuss the guidelines fully with Islands Trust planning staff during a preliminary meeting.

Proponents are also required to obtain all applicable building permits for additions and/or modifications to existing buildings.

### 4.2 Criteria

Before submitting a proposal for an *antenna system* on a new site, the *proponent* must explore the following options:

- consider *co-location* by sharing an existing *antenna system*;
- explore modifying or replacing a structure if necessary; and

- locate, analyze and attempt to use any feasible **existing infrastructure**, including (but not limited to) rooftops, water towers, utility poles or light standards; and
- explore the feasibility of designing a new antenna system where the visibility of the equipment is minimized from street level, including shrouding or stealth design.

Where *co-location*, re-use, modification, use of existing infrastructure, or a *stealth design* of a new structure is not feasible, a new *antenna system* should be designed with *co-location* capacity, including in *residential areas* when identified as the LTA’s preference.

The LTA recognizes that the objective of promoting *co-location* and the objective of making *antenna systems* less noticeable may sometimes come into conflict. Nevertheless, the LTA intends to review each submission on its merits with a view to promoting both objectives and, where necessary, will determine the appropriate balance between them. The *proponent* should, in all cases, verify the LTA’s site-specific criteria preferences during the pre-submission consultation process before investing in a final design or site.

### **A. Preferred locations**

When new *Antenna systems* must be constructed, **where technically feasible**, the following locations are preferred:

#### **1. Buildings & Infrastructure**

- Existing buildings and/or structure mounted *antenna systems*
- Areas that can access fiber optic networks to allow for backhauling into the fiber optic network

#### **2. Land Use Preferences**

- Industrial use land
- Agricultural use land
- Highway or service commercial use land (excluding mixed residential use)
- Land owned by the Islands Trust or another government entity
- Utility institutional use land were appropriate, but not limited to those institutions that require telecommunications technology, emergency services, hospitals, colleges
- BC Hydro utility corridor rights of way
- Low density *residential areas* as defined by the Local Trust Area

### **B. Distance Considerations**

- Distance of new free-standing towers from existing Safety shall be at least one (1) times the height of the proposed tower.
- Notwithstanding the distance of one (1) times the height of a proposed tower from property lines, the distance may be increased by the Local Trust Committee to a maximum of (3) times the height of the proposed tower. The LTC should consider a guideline of increasing the setback by up to 25% if it is reasonably anticipated that the tower may be **increased** in height by up to 25% in the future and otherwise be exempt from any public consultation process.
- Notwithstanding the distance of one (1) times the height of a proposed tower from property lines, the distance may be **decreased** if the location is consistent with the land use preferences of Article 4.2 A. 2 Preferred Locations and avoids discouraged locations of Article 4.2 C Discouraged Locations.
- Setbacks from property lines adjacent non-residential uses may invite special consideration in the Land Use Bylaw. The setbacks should serve to separate *Antenna systems* from adjacent development without unduly affecting the development potential of the lot over the lease period.

### C. **Discouraged Locations**

#### All Antenna Systems

- Locations directly in front of doors, windows, balconies or residential frontages
- Land zoned for nature protection
- Environmentally sensitive ecosystems as defined in the Official Community Plan

#### Free-standing Antenna Systems

- Medium and high density *residential areas* as defined by the Local Trust Area
- Schools, daycare facilities, playgrounds and similar facilities
- Areas that adversely impact view corridors
- Heritage areas (unless visibly unobtrusive) or on heritage structures unless it forms an integrated part of the structure's overall design (i.e. through the use of stealth structures).
- Sites of topographical and geographic prominence
- Sites that detrimentally affect the scenic quality of a corridor.
- Sites that detrimentally affect the foreground views of residents;

### D. **Incentives**

All or part of the public consultation requirements may be waived for *antenna systems* proposed on sites that are consistent with OCP policy, preferred siting locations, that exceed setback considerations, feature innovative design to a high standard and embrace infrastructure as art, included shrouded or internal antennae, and avoid discouraged locations.

In all cases, however, the *proponent* is required to provide **information** regarding the proposed antenna system in accordance with Section 3.2 E. Notification and Municipal Review of Exempt Antenna system.

### **E. Criteria not to address**

As described in the CPC, *proponents* have specific obligations subject to federal requirements. Additional obligations may not be imposed; however, it is appropriate to ask questions and seek clarification concerning their steps and alternatives available to satisfy these requirements.

Proponents must comply with the following:

- Health Canada’s public radio frequency exposure guidelines – Safety Code 6 (Limits of Human Exposure to Radio Frequency Electromagnetic Energy in the Frequency Range from 3 kHz to 300 GHz – Safety Code (2009));
- Radio Frequency Interference and Immunity – EMCAB-2—Criteria for Resolution of Immunity Complaints Involving Fundamental Emissions of Radiocommunications Transmitters;
- Canadian Environmental Assessment Act, 2012 –CEAA 2012; and
- Aeronautical Safety –Transport Canada and NAV CANADA requirements for aeronautical safety.

## 5 MODEL OFFICIAL COMMUNITY PLAN POLICIES

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### 5.1 Advocacy Policies

1. Health Canada should continue to evaluate health impacts of electromagnetic radiofrequencies from telecommunication facilities, including towers, to ensure that detrimental effects on human health do not occur.
2. Support efforts to expand electronic communications and infrastructure within the community provided it can be demonstrated that such is in compliance *with the Canadian Environmental Assessment Act (CEAA), and the Safety Code 6 of the Health Act.*
3. Support multi-Island public organizations such the Southern Gulf Islands Economic Sustainability Commission in its objective of improving the telecommunications services in the Gulf Islands.
4. Endorse the Canadian Radio and Television Commission policy statement on high speed broadband, especially by cable, as a basic service.
5. Encourage telecommunication providers to retain and increase the number of pay telephones in areas with poor cell coverage as an emergency back-up.
6. Encourage telecommunication providers to re-assess its fibre optic cable within the Local Trust Area (LTA) for public and institutional access and to allow third party access.
7. Promote the role of public and private wireless “hot spot” providers in improving connectivity.
9. Establish a fee schedule to recover reasonable staff and process expenditures to recover costs from telecommunication *proponents* with consideration given to the costs to Islands Trust to evaluate and process proposals.

### 5.2 Land Use Policy

#### A. Siting Objectives

1. Antenna Systems should be sited and designed to respect local sensitivities and preferences as identified by the LTA, including being unobtrusive and inconspicuous, minimizing visual impact, avoiding disturbance to natural features and reduce the need for future facilities in the same area, where appropriate.
2. Where *antenna systems* are proposed consideration is requested in the following order of priority:
  - a) **co-location** on an existing antenna system;
  - b) **re-use** of an existing telecommunication facility;

- c) use of **existing infrastructure** such as a building rooftop or utility pole;
  - d) *stealth design* of a new antenna system; and
  - e) **new** antenna system structure.
3. Where *co-location*, re-use, modification, or use of existing infrastructure is not feasible, a new *antenna system* should be designed with *co-location* capacity, including in *residential areas* when identified as the LTA's preference.
  4. The LTA recognizes that the objective of promoting *co-location* and the objective of making *Antenna systems* less noticeable may sometimes come into conflict. Nevertheless, the LTA intends to review each submission on its merits with a view to promoting both objectives and, where necessary, will determine the appropriate balance between them.

### **B. Land Use Preferences**

1. When new *antenna systems* must be constructed; **where technically feasible**, and such systems are not of *stealth design* or otherwise exempt from public consultation, they should be sited in the following land use categories:
  - industrial use land;
  - highway or service commercial use land (excluding mixed residential use);
  - utility institutional use land is appropriate, but not limited to those institutions that require telecommunications technology, emergency services, hospitals, colleges;
  - BC Hydro utility corridor rights of way;
  - low density *residential areas*; and
  - agricultural use land.
2. In all land use designations, the following building and infrastructure considerations are preferred:
  - use of existing buildings and/or structure mounted *antenna systems*; and
  - siting in areas that can access fiber optic networks to allow for backhauling into the fiber optic network.

### **C. Setback Considerations**

1. Preferred *setbacks* between antenna systems and lot lines should be at least 1 (one) times the height of the free-standing tower; the Local Trust Area may choose to adjust this preferred setback to reflect local conditions and preferences.
2. Notwithstanding a preferred *setback* distance of a proposed tower from residential uses, the setback distance may be **decreased** if the location is consistent with the land use

preferences of Article 5.2 B. 2 Land Use Preferences and avoids *discouraged locations of Article 5.2 D Discouraged Locations*.

3. Setbacks from non-residential uses may be determined on a case by case basis and should serve to separate *antenna systems* from adjacent development without unduly affecting the development potential of the lot over the lease period.

#### ***D. Discouraged Locations***

##### *1. Land use*

- Medium and high density *residential areas*
- Schools, daycare facilities, playgrounds and similar facilities
- Areas that adversely impact view corridors
- Heritage areas (unless visibly unobtrusive) or on heritage structures unless it forms an integrated part of the structure's overall design (i.e. through the use of stealth structures).
- Nature protection areas
- Environmentally sensitive ecosystems

##### *2. Other considerations, irrespective of land use designation*

- Locations directly in front of doors, windows, balconies or residential frontages
- Community gathering places such as community halls, churches, commercial eating & drinking establishments
- Sites of topographical and geographic prominence

## 6 ON-LINE BROCHURE ON THE DEFAULT ISED PUBLIC CONSULTATION & APPROVAL PROCESS AND THE ROLE OF ISLANDS TRUST

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**\*Pending – in design phase\***

## 7 DEFINITIONS

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**Antenna system (also telecommunication antenna system)** means an exterior transmitting device – or group of devices – used to receive and/or transmit radio-frequency (RF) signals, microwave signals, or other federally-licensed communications energy transmitted from, or to be received by, other antennas. *antenna system* includes the antenna, and may include a supporting tower, mast or other supporting structure, and an equipment shelter. This *protocol* refers to the following three types of *telecommunication antenna system*, defined below;

**Building/structure-mounted antenna system** means a *telecommunication antenna system* mounted on an existing structure or building and for the purposes of height calculations, height shall be measured from the base of any building or structure to the most elevated portion of any antenna system.

**Freestanding antenna system** means a structure built from the ground for the expressed purpose of hosting transmitting devices; and

**Tree-mounted antenna system:** means an antenna system mounted on a tree.

**Co-location** means the placement of antennas and equipment operated by one or more *proponents* on a *telecommunication antenna system* owned by a different party, thereby creating a shared facility;

**Community association** means an active area or neighbourhood specific group or association within a LTA;

**Distance** the horizontal distance measured from the lot line to the base of a proposed freestanding antenna system or the base of any building or structure to which an antenna system is mounted to a structure, building, or facility.

**Emergency service providers** means any police, fire, ambulance or search and rescue organization with a typical response area within the *notification distance* of a proposed *telecommunication antenna system*;

**Localized content** means any public consultation materials, supporting documentation and/or other relevant promotional material provided by a *proponent* for a proposed *telecommunication antenna system* which has been tailored specifically to the context of the LTA;

**Neighbouring land-use jurisdiction** means any land-use authority or First Nations within a *Prescribed Notification Distance* of any proposed *telecommunication antenna system*;

**Prescribed notification distance:** measured horizontally from the outside perimeter of the supporting structure of the proposed *freestanding* or *building/structure-mounted antenna system*. 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;

**Proponent:** means a company or organization, including contractors or agents undertaking work for telecommunication carriers, for the purpose of providing commercial telecommunication services;

**Protocol:** means any written local guideline, policy or process that addresses the issue of antenna placement;

**Residential area:** means lands used or zoned to permit residential uses, including mixed uses (i.e. where commercial use is permitted with residential use on the same lot).

**School District:** means an area created or constituted as a school district under the *School Act*;

**Sensitive community locations:** means institutions and services, such as schools, daycares, recreation facilities, public parks, or other sensitive locations;

**Stealth design:** means a design of an antenna system that camouflages the antenna and supporting structure as something else such as a tree, water tower, flag pole, component of a building, or similar means.

**Telecommunications antenna system:** see antenna system definition.

## 8 APPENDIX: ANTENNA DESIGN MATRIX

### Telecommunication Design

#### Typical Towers Designs



Height	30-120 m	45-60 m	14.9-45 m
Application	Rural	Rural/Suburbs/City	Rural/Suburbs/City
Compound Footprint	100m x 100m (H x 0.8 x 2)	Min. 20m x 20m	10m x 10m
Tower Diameter	Base of Pole min. 1m	Base min 10% height (H x .1 = face width)	Base footprint dependent on loading, geotechnical, environmental

#### Monopole Tower Designs

**Monopole 1  
(pin wheel)**



**Monopole 2  
(flush mount)**



**Monopole 3  
(shrouded)**



Pin wheel allows tower to accommodate a larger number of antennas for futures &/or other carriers.	Flush mounted antennas minimize overall massing of the tower, but limit opportunity for future antennas, or space for other carriers	Antennas fully hidden, but diameter of the pole is wider to accommodate microwave. Can be slimmer if there is fibre to site. *Note: shrouded design does not currently support AIR antenna w. integrated RRU's
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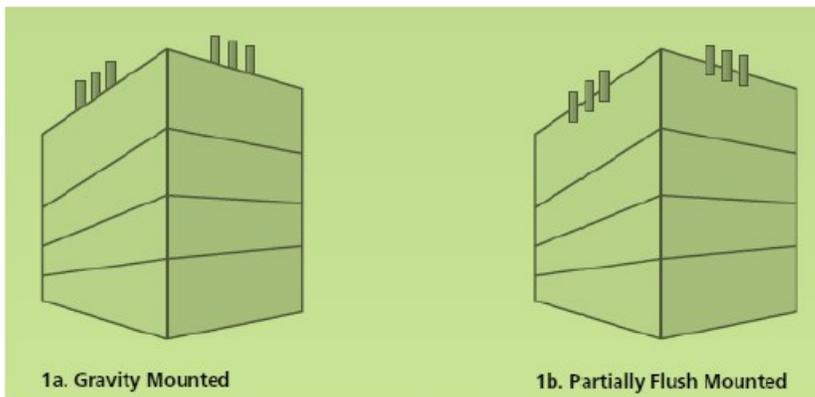
# Telecommunication Design

## Tripole Tower Designs



Height	14.9m-60m
Application	Rural/Suburbs/City
Compound Footprint	Medium footprint 20m x 20m
Tower Diameter	* Note: Base footprint dependent on loading, geotechnical, environmental

## Rooftop antennas



# Telecommunication Design

## *Utility Poles*



## *Light Standards*

