



Citizens for Safe Technology

ACTION REQUIRED: Microcell Resolution & Notice of Wireless Harm

At last month's UBCM, BC municipalities voted in favour of a Resolution mandating that land use authorities and the public be consulted when microcells are placed within 100 metres of schools, hospitals, and residences. This requested change to existing policy closes a federal loophole that allows microcells to be placed on existing structures with no public consultation whatsoever. Over the next several months, the FCM (*Federation of Canadian Municipalities*) will be discussing the content of the UBCM resolution with the federal government.

Although telecommunications fall under federal jurisdiction, in regions of the province where Right-of-Way lands are controlled by the Ministry of Transportation and Infrastructure, the provincial government is responsible for issuing Master Use Agreements and permits for each and every wireless transmitter installed. *Section 12* of the BC government's [Utility Policy Manual](#) lays out a very specific policy regulating the installation of wireless sites on MOT Right-of-Ways.

Why be concerned about microcells? While some individuals perceive them as benign or even benevolent transmitters that are essential to improving connectivity and achieving economic prosperity, a growing number of political leaders are concerned about the many issues arising from installing microcells in the public right-of-way. (See Section 3: **Why Land Use Authorities are Concerned about Microcells** below.) On October 15th 2017, SB 69 - a bill giving telecoms free rein to install microcells on California rights-of-way, [which 300 Californian cities opposed](#) - was vetoed by state Governor Jerry Brown.

High-speed connectivity is not dependent on microcells. Safe and data-secure technological options are available. (See Section 4: **Tech-Wise-Solutions for Connectivity** below.)

The material below summarizes the concerns about microcells and outlines important actions you may take **now** to insure that BC's provincial government is as fully engaged in the placement of microcells in our communities as current federal policy allows.

Suggested Approach:

- 1) Read the **Notice of Wireless Harm** in Section 2 below.
- 2) Review all permits and Master Use Agreements currently in place between the province and telecommunication companies. (See Section 5: **Action Check List** below.)
- 3) Take a few moments to read the material below so that you may make informed telecommunications decisions. This letter and the material below are also attached as a PDF,

With Best Wishes,

Citizens for Safe Technology
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Section 1: Overview

The Resolution that was passed:

WHEREAS public consultation on the placement of cell towers is mandated;
and

WHEREAS new technology is moving away from these large towers to micro-transmitters which do not require local government or public consultation;

THEREFORE BE IT RESOLVED that the AKBLG request the UBCM petition relevant provincial and federal governments to mandate consultation with

the land use authorities and the public regarding microcell transmitter siting within 100 metres of residences, schools and hospitals.

Why this Resolution Matters

ISED (*Innovation, Science and Economic Development*, formerly *Industry Canada*) allows microcells, or small cell antennas, to be placed on existing structures without any public input or often knowledge. In their 2014 [Guide to Assisting Land-Use Authorities in Developing Antenna Siting Protocols](#), Industry Canada makes an assumption that: “certain proposals ... have minimal impact on the local surroundings and so are excluded from public and land-use consultations.”

The UBCM’s support for the microcell placement resolution shows that ISED has underestimated and overlooked the impact microcells have on communities and their residents.

Section 2: Microcells - Notice of Wireless Harm

Although there is no scientific research proving microcells are safe, the widespread installation of microcell technology is based on the misconception that wireless transmitters cause no harm. [Thousands of independent scientific studies](#), however, link the RFR (radiofrequency radiation) microcells emit to increased cancer risk, neurological disorders, and infertility. Even low levels of RFR exposure over time have been linked to adverse effects on plants and [insects, especially pollinators](#).

- As of October 2017, 235 scientists from 41 countries have signed the [International EMF Scientists Appeal](#) urging world leaders to “protect mankind and wildlife from the dangers of EMFs and wireless technology.”

ISED says microcells are safe as long as they comply with Health Canada’s Safety Code 6. Health Canada, however, continues to ignore the non-thermal effects of artificial electromagnetic frequencies as well as the science which shows that exposure to these frequencies, [even at levels lower than those deemed safe by Safety Code 6](#), cause potential biological harm.

- On September 28, 2014, over [50 Canadian physicians](#) condemned Safety Code 6. On July 9, 2014, [fifty-three scientists from eighteen countries](#) called on Health Canada to intervene to “help avoid an emerging health crisis.”

Microcells are establishing the infrastructure for “5G” (fifth generation) technology which the telecom industry is poised to install across the nation. Although “5G” microwave frequencies have never been independently tested to prove they will not cause adverse biological and/or health effects, and are technically problematic, (they do not propagate or travel well), telecoms are forging ahead with implementing them. Installing a network of microcells near our homes and public buildings is the first step. When asked: “What is motivating the deployment of “5G”?,” at a recent technical meeting of the IEEE Communications Society at the University of Colorado/Boulder, Dr. H. Anthony Chan of Huawei Technologies replied, “If technology does not change, the company will die.... People must buy a new phone.”

- On Sept. 13, 2017, over 180 scientists from 35 countries sent a [declaration to the European Commission](#) calling for a moratorium on the rollout of microcell transmitters and “5G” saying that fifth generation technology “could lead to tragic, irreversible harm”

In 1998, Canada adopted the Wingspread Precautionary Principle, which states: “When an activity raises threats of harm to human health or the environment, precautionary measures should be taken, even if some cause and effect relationships are not fully established scientifically.”

Rethinking the indiscriminate installation of microcells in our communities supports this principle and protects the provincial governments from being liable for damage and injury resulting from wireless harm.

Section 3: [Why Land Use Authorities are Concerned about Microcells](#)

- **Public and Environmental Health and Safety** - as discussed in the above **Microcells - Notice of Wireless Harm.**

Note that *Section 12.3* of the MOT's **Utility Policy Manual** states: "The safety of the public and Ministry employees is critical in the location and operation of Wireless Communications Facilities. When a Wireless Communications Facility is located on Right-of-Way Lands the operation will be carried out in a manner that ensures that neither the public or Ministry employees are exposed to excessive levels of Radiofrequency energy."

- **Liability**

Once a land use authority has been made aware that microcells may cause personal injury or environmental harm, (the **Notice of Wireless Harm** above informs you of this) permitting microcell transmitters to be installed on Right-of-Way lands you control may be deemed an act of negligence, and you may be held liable for any environmental damage or personal injury resulting from this equipment having been installed.

Telecommunication workers ("linemen") and road maintenance crews are at particular risk.

In 2013, the *CRTC* and the *FCM* established this liability criterion in their **Model Municipal Access Agreement**, which may be downloaded here:

<http://crtc.gc.ca/cisc/eng/ciscmanu.htm>.

- **Local Authority & Urban Planning**

The [Antenna Siting Systems Protocol Template](#) developed in 2013 by the FCM and the *Canadian Wireless Telecommunications Association* (CWTA) offers municipalities examples of how they may add their input to antenna siting in their communities, specifying design preferences, for instance, or naming preferred and discouraged locations for antenna siting. However, once a land use authority gives its permission for microcells to be installed, telecommunication companies have the final say in where microcells are placed.

Policy Point 2 of Section 12 of the MOT's **Utility Policy Manual** says: "the installation, maintenance and operation of Wireless Communications

Facilities are generally permitted on highway structures where the use will not impact the physical integrity or the intended use of the structure, the safety of the highway user, Ministry employees or their contractors, or is an impediment to the operation and use of the highway.”

Microcells installed on MOT-controlled ROWS are having a negative impact on the above-mentioned areas as follows:

- **Public Health and Safety** Transmitters in the public right-of-way are affecting pole integrity, creating increased distraction for drivers, and causing sidewalk and roadway crowding.
- **Urban Planning:** There is no limit to the number of small cells allowed per property, and no consideration for competing demands, noise, size, lighting, design, or fiscal impacts.
- **Aesthetics & Property Values:** Universal deployment of microcells degrades intentionally designed neighborhoods and historic buildings, and negatively affects property values.
- **The Public’s Use and Enjoyment of the ROW:** Street-side gardening, block parties, neighbours visiting across the fence, children riding their bikes on the road by their homes... So many pastimes that add colour to a community and pleasure to life may be curtailed as citizens experience legitimate concern about lingering under the microcells and being exposed to radio frequencies.

Section 4: Tech-Wise - Solutions for Connectivity

Safe and data-secure technological options are available.

For mobile connectivity we could emulate Paris, France’s pilot project and install small cells with signals that are adequate for mobile use but do not penetrate buildings or peoples’ homes. For home and business internet access, wired networks of fiber optic and Ethernet cables or of fiber optic, copper wire and Ethernet cables (G-Fast) provide safe, fast, reliable, and cyber-secure connection, and will not blemish or obstruct local rights-of-way.

Section 5: Microcells – Provincial Rights and Responsibilities

Action Check List

- Have microcells been installed on existing structures in your district on MOT-controlled Right-of-Way lands?
- If not, do you want to discuss other connectivity options with telecom providers before giving them access to your ROWs?
- Are Master Use Agreements in place in those districts that have microcells installed?
- If microcells are installed in ROWs:
 - Have permits been applied for by the telecom and issued by the district for each and every transmitter installed?
 - Has the company who installed the microcell network supplied RF exposure level data for each installation?
 - Has the company been asked what strategies they have employed to keep the ambient RF radiation levels in residential areas as low as possible, and what strategies could still be implemented?
- Has the telecom submitted detailed drawings to the appropriate District Office for each microcell installation, as outlined in *Section 12.5.3* of the **Utilities Policy Manual**?
- Has this site permit been reviewed by the bodies below as required by MOT policy?
 - Manager, Electrical Engineering, South Coast Region
 - Electrical District Manager
 - The Radio and Electronics Section, Construction and Maintenance Branch