

# BRIEF SUBMITTED BY VILLE DE MONTRÉAL

## **Review of Canada's Legislative Framework on Communications**

Presented to the Broadcasting and Telecommunications Legislative Review  
c/o Innovation, Science and Economic Development Canada

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Montréal 

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## Introduction

Ville de Montréal is enthusiastic about reviewing Canada's legislative framework on communications. It hopes that the new legislative framework on communications, and more specifically the fifth generation of wireless communication (5G) technology, is reviewed in depth and gives or confirms more flexibility to municipalities given the importance of communications for all citizens.

The deployment of 5G technology is an important transformation throughout the world. The City is concerned about several facets of this deployment:

- The extent of the deployment and the impact on its urban territory.
- The role of municipal government in the implementation of the technology.
- The use of the technology.
- Access to a powerful, consistent and secure service for citizens throughout its territory.

The City supports the key recommendations in the FCM submission that was tabled during the review of Canada's legislative framework on communications, including:

- *Maintain the essential role of municipalities in managing the public space for the benefit of all users, a task that no other entity can perform either operationally or legally.*
- *Maintain the integrity of local taxpayers and not transfer the costs indirectly to the municipal tax base.*
- *Maintain the wording of sections 43 and 44 of the Telecommunications Act.*

In this document, the City provides additional recommendations to the Review Group:

- *Define and standardize service levels for all telecommunications companies.*
- *Modify the provisions of the current legislative framework on essential services and infrastructures to ensure that these services are available to all municipalities and their citizens.*
- *Ensure that there is adequate oversight to support services with a higher level of confidentiality.*
- *Establish a process of governance that involves the different stakeholders to define standards between owners of passive infrastructures and users of these infrastructures.*

Over the past few years, Ville de Montréal has been studying several issues related to the deployment of new technologies, both for its own needs and for those of its citizens. Among the technologies that have been analyzed, the deployment of Internet of Things (IoT) involves challenges that are similar to those for 5G.

The City has worked with CIRAIG to obtain an opinion on the social acceptability of an IoT deployment. These recommendations are included in the [CIRAIG report available on the City's website](#) and informs the reader about the ethical and social acceptability challenges. The findings in

this report have allowed the City to start on a broader reflection of the challenges with deploying 5G in its territory.

To clarify the major challenges related to the deployment of 5G technology, the City commissioned a report on the models and challenges for the deployment of next-generation telecom systems in cities. This [CEFRIO report is available on City's website](#).

This report raises several challenges: the lack of legislative or regulatory framework on the use of street furniture for communication purposes as well as on data governance.

With this submission, the City wants to make known its main concerns about the upcoming deployment of new technology in its territory.

Below is a summary of these concerns:

- The City has limited regulatory authority over the activities of telecommunications companies.
- The scale of the massive 5G deployment will include many governance and urban planning challenges.
- Legislation does not regulate the deployment of telecommunication or passive infrastructures.
- Service levels adapted to public safety and essential infrastructures have not been defined.
- The rules governing the use of data collected for purposes other than delivery or improvement of the service are not well defined.
- Competition for the supply of telecommunications services is limited to support communication service requirements for public safety and essential services.
- Municipalities have no leverage to ensure that communication services of the same quality are available in the territory within a reasonable time frame.

The City hopes that the Broadcasting and Telecommunications Legislative Review Panel will be able to consider all of these concerns while they reflect and in the resulting proposals in order to:

1. Clarify the legislative framework for municipalities.
2. Allow for a better match between planning and communication services deployments.
3. Promote more consistent access to communications services throughout the territory.
4. Promote competition between application service providers.
5. Standardize the levels of communication services, particularly for essential services and infrastructures.

In addition, the City suggests several courses of action that should allow us to start thinking about improving the current legislative framework.

## Context

The deployment of the fifth generation of wireless communication (5G) is a significant transformation for Ville de Montréal. Ville de Montréal must prepare to manage this major change.

A number of promises have been made for 5G and the City must ensure that it achieves its objectives for public safety, economic development, low-cost use of services, the implementation of new 5G services, social acceptability and urban planning without creating a digital divide.

With the deployment of 5G, the City must promote the achievement of its strategic interests, including:

- Promote the citizens' digital experience by accelerating the implementation of the smart city while avoiding digital divides.
- Exercise control in the deployment of 5G to validate social acceptability and ensure consistency with its urban plan.
- Ensure a priority level of service for emergency measures and essential infrastructures; democratize, promote, but also manage the deployment of this new communication technology.
- Promote economic development focused on the technological sectors of the future.
- As a user of 5G, ensure that the City benefits from a low-cost network for its current and future needs.
- Facilitate better management of mobility and city life (transportation, environment, urban planning, etc.).
- Allow for the deployment of connected vehicles.
- Provide continuous protection of Montrealers' data and privacy.

The deployment of this technology poses challenges for urban planning and governance. 5G technology requires very significant densification of the physical infrastructure that support its deployment. Ville de Montréal estimates that it will deploy between 40,000 and 60,000 antennas to cover all of its territory to the full potential of 5G. By way of comparison, the 4G cellular network has fewer than 5,000 antennas.

The general recommended approach is that Ville de Montréal must be an active participant in the deployment of this new technology.

With the upcoming deployment of 5G-related infrastructure, the City wants to ensure that the different levels of service that will serve public safety and essential infrastructures will be adequate for day-to-day operations and emergencies.

In the current federal legislation, service levels are not regulated. As a result, at this time, telecommunications companies offer LTE service to their customers without any guarantee of service. Yet, 5G technology presents an opportunity that would allow for the implementation of multiple levels of service.

The City wants the new legislation to better regulate classes of services and include requirements to support these levels of services.

For example, the City groups its telecommunications service requirements with different levels of service.

Type of service	Service details	Levels of service
<b>Essential services</b>	<ul style="list-style-type: none"> <li>● Essential infrastructures</li> <li>● Public safety (police, firefighters, 911 emergency centres, Urgences-santé).</li> <li>● Management of drinking water, sewers.</li> <li>● etc.</li> </ul>	<i>safety critical service</i>
<b>Public services</b>	<ul style="list-style-type: none"> <li>● Water service</li> <li>● Infrastructure, roads and transportation services</li> <li>● Culture service</li> <li>● etc.</li> </ul>	<i>mission critical service</i>
<b>Citizen services</b>	<ul style="list-style-type: none"> <li>● Online services</li> <li>● Waste collection</li> <li>● Maintenance and snow removal</li> <li>● Public wi-fi</li> <li>● etc.</li> </ul>	<i>best effort</i>

Montréal expects the current fiscal year to lead to a modernization of federal communications legislation.

Furthermore, we hope that municipalities and their citizens will be better protected by new legislative provisions.

With this submission in response to the **Review of the Canadian Legislative Framework on Communications** consultation, Ville de Montréal will only comment on laws regarding telecommunications and radio communications. Consequently, the City will not comment on section IV of the Broadcasting Act.

## Questions raised in the terms of reference

### Telecommunications Act and Radiocommunication Act

#### 1. Universal access and deployment

[1.1 Are the right legislative tools in place to ensure access to high-quality, affordable services for all Canadians, including those living in rural and remote communities, as well as in Indigenous communities?](#)

As the level of government closest to businesses and citizens, municipalities recognize that the growth and future prosperity of the communities they represent depend on access to affordable, quality services.

With its proximity, the City has a better understanding of demographic differences, as well as the special needs of its citizens. In particular, the City wants to minimize the digital divide and prevent it from increasing.

The City also has an obligation to provide public safety services as well as several essential services, such as the production of drinking water. In order to provide these critical services, the City also needs access to high-quality and affordable communications services throughout its territory.

The City's urban plan presents its vision of development for its territory. Unfortunately, communication services are being deployed at the same time as its urban plan.

The City has observed several challenges related to providing access to affordable and quality services:

- Communication service levels are not clearly defined in the legislation making it impossible to compare the quality of communication services from the various communication companies.
- The importance of the role of municipalities in a consistent and optimal deployment of communications services in the public space is unclear.
- Planning for deployments of telecommunications services by telecommunications companies is not integrated into municipalities' plans.
- Strategic planning for the deployment of telecommunications services is not systematically shared with municipalities by the telecommunications companies.
- Coverage of communications services is primarily related to the economic factors of the telecommunications companies and not related to the needs of citizens.
- Communications services for public safety and essential services must be competitive, affordable and high quality.

We recommend that the following measures be evaluated:

- Define and standardize service levels for all telecommunications companies.
- Recognize the importance of the role of municipalities and provide them with levers to ensure their citizens have access to consistent coverage, quality of service and competitive rates for communications services in the public space.
- Require that deployment planning for communications services covers an entire territory within a reasonable time frame and be communicated to the municipalities.
- Continue to encourage the sharing of communication infrastructure services between telecommunications companies when relevant:
  - Help to accelerate the deployment plan for full coverage of communication services to citizens.
  - Help to reduce the overall cost of deploying communications services, allowing new players to benefit from existing infrastructures.

1.2 Given the importance of the passive infrastructure for network deployment and the anticipated growth of the 5G wireless network, are the right provisions in place for the governance of these assets?

Since passive infrastructures were in low demand in the past, we find that many aspects of this infrastructure were not explicitly regulated in previous deployments of wireless technologies.

Ville de Montréal is responsible for the street furniture that it owns. More specifically, it manages the deployment, maintenance and disposal of equipment, aesthetics and physical safety. The City is also responsible for and manages municipal consent for right of way and permanent installations in its territory.

The City has observed several challenges related to governance and use of the passive infrastructure:

- Municipalities have no power or explicit role in ensuring that existing passive infrastructures are used in accordance with the urban plan.
- No clear or precise definition of passive infrastructures or passive infrastructure classes in the current legislation.
- Lack of standardization in causal costs for municipalities for the use of passive infrastructures.
- Lack of global visibility of passive infrastructure inventories.
- Several problems due to lack of governance, in particular:
  - All of the following: installation, repair, maintenance.
  - Better layout by sector (antenna location, fibre paths, etc.).
  - Management of energy supplies.
  - Fair cost sharing.
  - Integration of aesthetic aspects.
  - Awareness of social responsibility (propagation of electromagnetic waves).
  - Prioritization of the sectors to be deployed.
  - Recognition of the ownership of passive infrastructures.

We recommend that the following measures be evaluated:

- Grant express authority to municipalities for the management, use, deployment and aesthetic choices of passive infrastructure in accordance with their urban plans and the needs of their citizens.
- Clearly define the passive infrastructure as well as the characteristics of the various asset classes.
- Consider micro-cells and access networks as essential access services due to the limited availability of locations in public passive infrastructures.
- Promote the creation and maintenance of a global inventory of passive infrastructures.
- Promote the sharing of communication infrastructure services between telecommunication companies in order to:
  - Optimize the use of passive infrastructures.
  - Promote sustainable competition.
  - Facilitate the deployment of telecommunications infrastructures using them.
  - Reduce the cost of maintaining and supporting passive infrastructures.
  - Simplify governance.
- Confirm whether federal legislation would allow municipalities to become *wholesale* distributors of passive infrastructure services.



- Establish a governance process that includes the various stakeholders (municipalities, members of the Canadian Network Operator Consortium (CNOOC), telecommunications service companies, utilities, etc.) to define standards between owners of passive infrastructures and users of these infrastructures.

In our opinion, to contribute to the good governance of passive infrastructures, federal legislation must cover all aspects of management, maintenance and deployment of passive infrastructures and grant specific powers to the municipalities on the use of passive infrastructures in all of their territories.

## **2. Competition, innovation and access to affordable services**

### [2.1 Are the legislative changes justified to better promote competition, innovation and access to affordable services?](#)

Currently, federal legislation and the system for allocating frequency spectra do not promote healthy competition and does little to encourage innovation to make access to new services more affordable. In addition, legislative changes are needed to allow small telecommunications service providers to access the market, which would increase access to more affordable services for all municipalities and their citizens.

To promote access to affordable services, the City proposes solutions that are set out in question 1.1.

## **3. Internet neutrality**

### [3.1 Are current legislative provisions sufficient to protect the principles of Internet neutrality in the future?](#)

The City is very aware of Net neutrality. It expressed an opinion and submitted a motion on net neutrality in early 2018. Refer to the attached copy of the motion.

The current legislative framework only addresses some of the net neutrality issues. Below are our main findings:

- At this time, net neutrality applies only if infrastructures are in place. We could strengthen the notion of net neutrality by including the elements from point 1 (universal access and deployment) and consider that digital divides go against the concept of net neutrality:
  - For example, requiring telecommunications companies to have a deployment plan that covers an entire sector (for example the territory of a municipality) within a reasonable time frame would be a step in this direction.
- Net neutrality seems to be missing from essential services and infrastructures, notably Public Safety.
  - Some extreme cases have recently been observed in the United States. For example, Verizon reduced the bandwidth of a fire department unilaterally during a fire. With its new policy that no longer ensures net neutrality, the FCC does not have the power to investigate.

<https://arstechnica.com/tech-policy/2018/08/verizon-throttled-fire-departments-unlimited-data-during-calif-wildfire/>

- Net neutrality is a principle that must ensure the equal treatment of all data flows on the Internet, free of discrimination as to source, destination, content and network for all citizens and businesses.

We recommend that the following measures be evaluated:

- Amend the provisions of the current legislative framework to ensure equal treatment of all data flows across all classes of services.
- Amend the provisions of the current legislative framework on essential services and infrastructures to ensure that these services are available to all municipalities and their citizens.
- Strengthen and guarantee the protection of net neutrality in the current legislative framework.

#### **4. Consumer protection, rights and accessibility**

##### **4.1 Is there a need to further improve consumer protection, rights and accessibility in the legislation?**

The City cannot comment on all issues regarding consumer protection, rights and accessibility.

In terms of accessibility, the City considers that affordable access is essential for its citizens and proposes possible solutions that are set out in question 1.1

#### **5. Safety, security and protection of privacy**

##### **5.1 Keeping the broader legislative framework in mind, to what extent should the concepts of safety and security be included in the Telecommunications Act and in the Radiocommunication Act?**

The City cannot comment on all issues concerning safety, security and privacy.

However, the City feels that how data is used when collected for purposes other than delivery or improvement of the service is not well defined.

Federal legislation should be improved to guarantee the protection of consumer privacy, especially with the arrival of the new 5G technology. Below are our main findings:

- Access to various types of data (metadata, functional and informational data) is not adequately monitored.
- The use of data collected for purposes other than delivery or improvement of the service is not regulated (secondary use of the data).
- Absence of separation of data according to the different classes of services.
- Certain levels of services (public safety and essential services) have higher levels of confidentiality that must be taken into account at the source.

- For example, the metadata collected when telecommunications services are used by essential services and infrastructures, including public security (location of police officers, amount of data transmitted, etc.).

We recommend that the following measures be evaluated:

- Ensure that federal legislation can regulate these secondary use of data.
- Establish a mechanism to recurrently review the provisions of the legislative frameworks. More specifically, this should include mechanisms for regulating all current and future data collected.
- Ensure that there are appropriate regulations to support services with a higher level of confidentiality.

## 6. Effective spectrum regulation

6.1 Are adequate legislative tools in place to ensure a balance between the need for flexibility to quickly introduce new wireless technologies on the one hand, and the need to ensure that devices can be used safely and without interference on the other hand?

The City does not want to comment on all of the regulations governing the allocation of frequency spectrum. Below are just a few observations:

- The current bands allocated for public security will clearly be insufficient with the advent of 5G technology (700Mhz, band 14).
- The bidding allocation method limits competition due to the market entry price.
  - A model using royalties with recurring revenues or at zero cost would be more in line with a shared model.

We recommend that the following measures be evaluated:

- Reserve sufficient frequency spectrum blocks to include all essential services and infrastructures, including public safety.

In our opinion, the Telecommunications Act must contain sufficient guidance to ensure future requirements for reserving spectrum blocks and allowing access to smaller providers.

## 7. Effective governance and administration

7.1 Is the current allocation of responsibilities to the CRTC and other departments appropriate in the modern context and does it support a competitive telecommunications market?

The City would like the CRTC to be given additional responsibilities, especially during security certification with the introduction of new telecommunications services resulting from the new technologies deployed.

7.2 Does the legislation strike the right balance between allowing the government to set overall policy direction and maintain effective regulatory independence?

The City does not want to comment on this issue. However, we want the CRTC to maintain independence and neutrality in the regulation of telecommunications services.

**Broadcasting Act**

**Questions 8 to 14 in the frame of reference**

The City will not comment on section IV of the Broadcasting Act.

## Appendices

### Copy of the City's motion on net neutrality



#### **Motion by the Official Opposition**

65.04

City Council meeting of February 19, 2018

#### **Motion supporting the protection of net neutrality**

**Whereas** net neutrality is a principle that must ensure the equal treatment of all data flows on the Internet, free of discrimination as to source, destination, content and network for all citizens and businesses.

**Whereas** the *Telecommunications Act* states that "No Canadian carrier shall, in relation to the provision of a telecommunications service or the charging of a rate for it, unjustly discriminate or give an undue or unreasonable preference toward any person, including itself, or subject any person to an undue or unreasonable disadvantage."

**Whereas** the Canadian Radio-television and Telecommunications Commission (CRTC) published, in April 2017, Regulatory Policy 2017-104 restricting the differential pricing practices of Internet service providers that go against net neutrality.

**Whereas** the US Federal Communications Commission (FCC) repealed net neutrality rules in the United States on December 14, 2017.

**Whereas** the US decision could encourage Canadian companies to make representations to the CRTC and the Canadian government to have net neutrality abolished in Canada as well.

**Whereas** attempts to control data that go against net neutrality have already occurred by Canadian companies such as Telus, Bell and Videotron, but these attempts have failed.

**Whereas** net neutrality fosters innovation and competition between the service providers and that its abolition could increase the cost of Canadian Internet services, which are already among the highest in the world.

**Whereas** the Canadian government plans to amend the *Telecommunications Act*.

**Dominic Perri, Councillor from Ville de Saint-Léonard moved  
and Abdelhaq Sari, Councillor from Ville de Montréal-Nord seconded:**

**That** the City of Montreal affirms the importance of net neutrality, considering its contribution to the economic and social growth of its citizens and businesses.

**That Ville de Montréal calls on the Canadian government to strengthen the protection of net neutrality in the *Telecommunications Act*.**

## Relevant bibliography

1. [Contributions to a conceptual framework for managing social and ethical issues of urban LoT.](#) CIRAIG (2018).
2. [Cities for Digital Rights](#) (2018)
3. [Ethical Issues and Social Acceptability of IoT in the Smart City.](#)CIRAIG (2018).
4. [Framework for distributed governance of Distributed Architectures](#) . DECODE project. European Union (2018)
5. *La plateforme d'une ville.* Commission nationale informatique et libertés. France (2018)
6. [Models and Challenges for the Deployment of Next-Generation Telecom Systems in Cities](#) (5G). CEFRIO (2018)
7. [Policy Requirement and Models of Implementation.](#) DECODE project. European Union (2018)
8. [Politique sur l'utilisation et le développement des logiciels et du matériel libre. Ville de Montréal](#) (2018)
9. [Reclaiming the Smart City: Personal Data, Trust and the New Commons.](#) NESTA, United Kingdom (2018)
10. [Third Biennial Plan to the Open Government Partnership. Government of Canada](#) (2018).