the attaingroup
innovative telecommunications consulting

# The Property Manager's Guide to Managed Telecommunications

## Background

Today's building owners and property managers are often called upon to facilitate, oversee, or perform telecommunication projects in their properties. But it can be difficult to understand the state of a building's telecommunication assets and how best to manage them, as it involves a myriad of related concerns, such as:

- Which carriers and tenants are responsible for what wiring
- What infrastructure is owned versus what is leased – and by whom
- The legal and financial implications of carrier lease agreements and what rights (or liabilities) they grant the property owner
- What type of voice and data services the building is equipped to offer
- Whether the building's infrastructure is sufficient to support tenant technology requirements
- Whether telecommunication cabling installations meet building code, fire code, and best practices.

Moreover, deregulation of the telecommunication industry has increased the number of requests from tenants and carriers and has raised questions around who is liable and responsible for telecommunication infrastructure in buildings. Although telecommunication cabling has an impact on property owners' liability, building owners are often not in control of the telecommunication and other low-voltage cabling in their own properties.

While a building's mechanical, electrical and HVAC systems are professionally and proactively managed by experts, telecommunication systems are typically addressed only when problems arise. Yet for most building tenants, a building's telecommunication infrastructure is as mission-critical to their businesses as its electrical system. The telecommunication services available in a building are also increasingly playing a role in attracting and retaining commercial or retail tenants as well as retail customers.

For these reasons, an increasing number of building owners and property managers are realizing the business value of **managed telecommunications.** By proactively managing telecommunication systems, real estate professionals can reduce risk, protect their existing investment and realize new revenue opportunities in their properties.

# Managed Telecommunications 101

A building's telecommunication infrastructure creates a footprint both inside and outside the property's walls. Entering the building via copper and fibre cables, a building's telecommunication system extends through the Main Telecom Room to telecom rooms on each floor and through building walls and ceilings to the tenant premises. Services may also enter via a rooftop antenna or satellite dish.

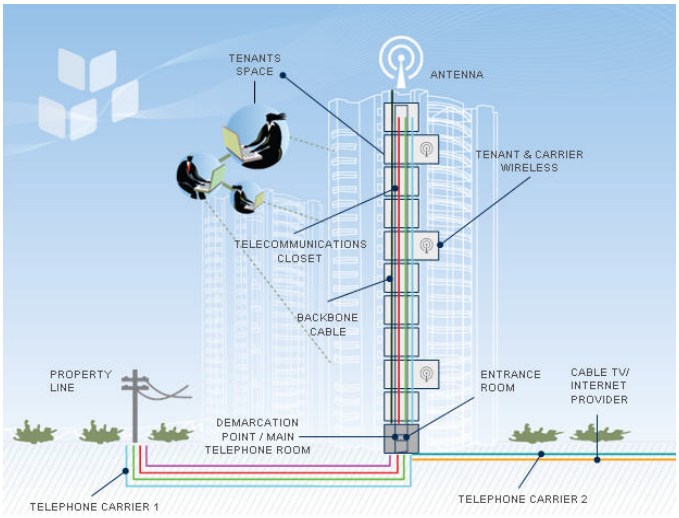


***Figure 1: A standard building telecommunication infrastructure***

Telecommunication carriers provide the backbone of a building's telecommunication infrastructure – delivering voice, data, cable, and wireless services to tenants. In Canada, carriers can be divided into three types:

- **Facilities-based carriers**
  These carriers own the switching and transmission systems used to provide services to customers. Notable facilities-based carriers include Bell Canada, Telus, Atria Networks, MTS Allstream and Rogers Telecom.

- **Reseller carriers**
  Reseller carriers lease, rather than own, the networks used to serve their customer base. Notable reseller carriers include Sprint/CallNet, Primus Canada and Vonage.

- **Wireless carriers**
  Wireless carriers own and install communications infrastructure such as antennas, satellite dishes, and interior wireless access points – and deliver wireless services over these networks. Common wireless carriers include Terago, Storm Internet, Bell Cellular, Telus Cellular and Rogers Cellular.

It is not uncommon for a building to require services from each category of carrier, or for a building owner to deal with multiple carriers within each category.

The existence of multiple carrier types reflects the growing telecommunication needs of tenants. As companies incorporate voice, data, wireless internet, cable TV and video

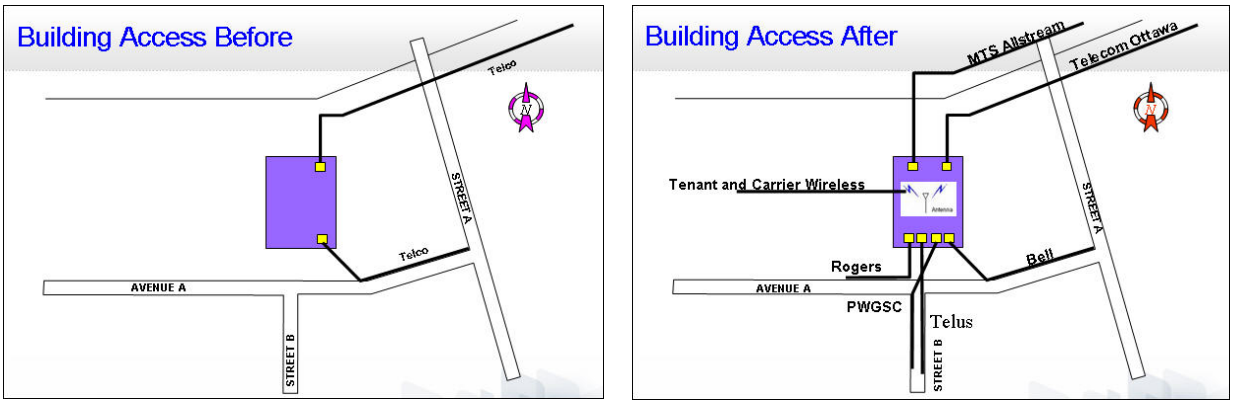


***Figure 2: Building access before and after telecom deregulation***

conferencing capabilities into their operations, their telecommunication infrastructure needs grow. It is not uncommon for today's tenants to look to property managers to provide the following services:

- Telecommunications and computer room fit-up
- Cooling, power, UPS & generator equipment
- Wireless audits and infrastructure planning
- Horizontal cabling & pathways
- Rooftop access for anteanna placement
- Access to telecom rooms, risers, and conduits for cable and/or equipment placement

These tenant telecommunication requirements present a host of issues that building owners must consider, such as:

- **Engineered telecommunications grounding and bonding systems**

- **Abandoned cabling**
  Abandoned telecommunication cabling presents a fire hazard in buildings, and is now the property owner's responsibility to remove.

**SUCCESS STORY**

Attain Saves Client $100,000 in Cabling Costs

**Problem:** A federal government department retained The Attain Group to manage the communications fit-up of a data center during its relocation to a new complex. The department had previously been advised that a specific cable rating for a raised floor would be required.

**Process:** As a part of our Build, Move, Adds & Changes ("Fit-Up") services, we:

- Questioned and further investigated the ruling the client had obtained.
- Worked with a codes consultant to analyze the fire code and obtained a ruling for this specific situation.
- When the ruling differed from the original, we obtained the agreement of all necessary parties, including the City.

**Results:** A new ruling saved the client more than $100,000 in cabling costs, which the client put towards other aspects of the fit-up.

- **Standards compliance**
  As telecommunication standards change, owners must ensure that their infrastructure is up to standards.

- **Asset inventory management**
  A system and process is required to keep track of the building's telecommunication assets, ownership, and license agreements (including associated fees).

*Figure 3: Abandoned cable*

- **Carrier management & license agreements**
  These agreements must be fully understood and regularly reviewed and updated. In many cases, carrier rates can be renegotiated based on the revenue that they are able to commission from the placement of telecommunication equipment in or on a building.

- **Care of common telecom rooms & access rights**
  The building owner needs to monitor which carriers/installers are accessing telecom rooms and for what purpose, and the installations must be supervised or reviewed to ensure conformance to code and building policy.

- **Rooftop access & equipment installation**
  Antennae and satellite dishes installed on building rooftops must be carefully managed to ensure that the building's envelope is not harmed, that proper safety code is followed, and to ensure that the carrier's use of the equipment is fully covered by the license agreement.

- **Revenue opportunities**
  Building owners can recover fees and expenses for certain telecommunication operations – if they are aware of them.

Proper management of a building's telecommunication infrastructure therefore requires an understanding of tenant needs and requirements; carrier operations and license agreements; building, fire and safety codes; and the ability to liaise with key service providers. Property managers must also oversee the work performed within their buildings and maintain proper documentation of all telecommunication components. In short, building owners must have a proven and continuous management system in place

to proactively monitor and manage their building's telecommunication systems. Fortunately, such a process does exist, and can be learned or outsourced to telecommunication experts.

## A Working Model for Managed Telecommunications

An effective telecommunication management system takes stock of the current telecommunication equipment and practices, budgets for maintenance and capital expenditures, and ensures that preventative maintenance takes place on a regular basis.

Here is a six-step model that can be followed to effectively manage a building's telecommunication infrastructure:

### Step 1: Learn what you have

The first step to any telecommunication management strategy is to conduct a survey of the existing telecommunication infrastructure in the building. This survey should start in the basement at the main telecommunication entrance and end on the roof with a survey of any antennae or satellite dishes.

This survey should:

- Document all existing telecommunication assets and to assess the state of those assets.
- Review and interpret Telecommunication License Agreements (TLA) and provide expertise in preparing these agreements between landlords and carriers.
- Inspect all fire-stopping and ensure adherence to building codes.
- Provide a detailed lifecycle plan, with associated tasks and budgets.
- Evaluate the telecommunication assets for the purposes of insurance and mortgage valuations.
- Establish an up-to-date record of all telecommunication systems, along with a maintenance process.
- Establish a database from which cable records or other key asset information can be tracked and maintained.

**SUCCESS STORY**
Attain Services Reduce Client Telecom Construction Costs by 25%

**Problem:** After purchasing a 40,000 square foot building with an existing telecom infrastructure in place, a government department wished to reuse the existing telecommunications infrastructure.

**Process:** The Attain Group provided its Telecom Building Conditioning Report service to the client.

**Results:** Based on The Attain Group's review, the department was able to reclaim a large portion of the building's existing telecom infrastructure. By reusing the existing assets identified by The Attain Group, the department was able to save 25% of the total cost of telecommunications construction.

### Step 2: Understand the condition of assets

Once identified in the survey, the telecommunication assets must be evaluated to determine their health and adherence to current codes and standards. At this stage, building managers should determine and document their telecommunication liabilities and lifecycle planning requirements for all telecommunication systems. This step should include identification of any redundancies, deficiencies, and risks that may arise from the telecommunication infrastructure's current condition. It may also identify opportunities available through newer technologies that may provide advantages such as longer life, broader use, space savings, and reduced liability through greater safety.

*Figure 4: Rooftop satellite dish*

### Step 3: Develop a plan

A good telecommunication management program requires a detailed lifecycle plan. This plan should span 5 to 25 years and detail all anticipated tasks and costs related to low-voltage systems. In creating this plan, building owners should assess the building's long-term needs and ensure that the telecommunication strategy is aligned with the type of tenants that the owner wishes to attract. The resulting plan should be much like – and just as easy to maintain as – a typical long-term property maintenance plan.

### Step 4: Develop the budget

Once the management plan is in place, property managers can prepare a budget for the maintenance and capital expenditures detailed in the plan. This budget should include both short and long term purchases and maintenance expenditures.

### Step 5: Implement the plan

The next step is to translate the plan on paper into action. Building owners should begin by addressing immediate deficiencies, repairs and potential health and safety violations identified in the plan. Additional activities and purchases can then be made based on the budgets and timelines indicated in the management plan.

### Step 6: Maintain the system

Telecommunication management is a continuous process, so building owners need to develop standards and operating procedures to ensure that the integrity of the telecommunication infrastructure is never compromised. Reviews of the plan, the infrastructure, carrier agreements, and tenant needs should be conducted on an annual basis, or as tenants or the building's profile change. The telecommunication infrastructure should also be reviewed as part of any new construction or renovation planning that is undertaken.

## The Attain Infrastructure Management Program

The Attain Infrastructure Management (AIM) Program is a full-service maintenance contract comparable to other building asset preventative maintenance programs. The program provides building owners with a single point of contact and qualified oversight for all telecommunication needs.

Following the process recommended above, the AIM program provides building owners with a complete telecommunication management program. This service is designed to help real estate professionals:

- Mitigate risk and liability
- Create new sources of revenue
- Develop operational efficiencies
- Improve tenant retention


***Figure 5: The AIM Program***

Delivered by professional and independent telecommunication consultants and engineers, the AIM Program provides property managers with a customized, working model for managed telecommunication and ensures that the following items are in place:

- Telecommunication Building Condition Report (TBCR)
- Telecommunication leasing rent roll
- Management plan, including maintenance and capital budgets
- Policies, procedures and standards for telecommunication access and installation
- Tenant move-in and move-out inspections and reports

Other specific services can also be incorporated into the AIM Program, including the following:

- Tenant license agreement reviews
- Market rate surveys for license agreements
- Abandoned cable inspection
- Base building engineering services
- Drawing reviews
- Telecommunication design and project management
- Training

In addition, The Attain Group offers training courses in telecommunication property management that are designed for building owners and property managers. While property managers cannot expect to have the time or expertise to manage 100% of their building's telecommunication needs, training can empower them to confidently understand and manage many of the day-to-day tenant and carrier requests that they may receive. When combined with the AIM Program, training enables building owners, property managers, and Attain to partner with each other to protect the telecommunication investment and maximize its revenue-generating potential for the building.

**ATTAIN CREDENTIALS**

The Attain Group brings the following credentials to bear on every project:

- Professional Engineers in Ontario, Alberta and Quebec
- Registered Communications Distribution Designers (RCDD)
- Telecommunication Drafting Services (CADD)
- Certified Electronic Technologists (CET)
- Network Transport Specialists (NTS)
- Telecommunication Business Analysts (TBA)
- Codes Specialists (P.Eng)
- Energy Management Technologist (DEC)
- Real Property Administrator (RPA)

Through managed telecommunication, real estate professionals can make smarter business decisions. A professionally managed telecommunication infrastructure helps to reduce risk and liabilities, protects existing investments, increases tenant satisfaction and can open up new revenue streams.

For more details about how we can help you better manage the telecommunication infrastructure used by your tenants, please contact us:

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## About the Attain Group

### We See the Big Picture

At The Attain Group, we help eliminate unwanted surprises and ease the burden of telecommunication management for organizations that oversee significant properties.

We provide independent telecommunication consulting and engineering services to both public and private real estate owners, federal government departments, architectural and construction engineering firms, and tenants. Our expertise helps these organizations to better understand, control, and protect their telecommunication assets.

## À propos du Groupe LGA

### Pour une vision d'ensemble

Groupe LGA élimine les mauvaises surprises et facilite la gestion des télécommunications pour les gestionnaires immobiliers des organismes qui supervisent de grandes propriétés.

Groupe LGA fournit des services de consultation et ingénierie en télécommunications aux propriétaires immobiliers publics et privés, aux ministères gouvernementaux, aux bureaux d'architectes, aux entreprises de construction et aux locataires. Grâce à notre expertise, nous aidons ces organismes à mieux comprendre, contrôler et protéger leurs investissements en télécommunications.