



**STAFF REPORT  
ACTION REQUIRED**

**Municipal Access Agreement for Telecommunication  
Installations – DAScom Inc.**

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| <b>Date:</b>             | May 19, 2009                              |
| <b>To:</b>               | Public Works and Infrastructure Committee |
| <b>From:</b>             | General Manager, Transportation Services  |
| <b>Wards:</b>            | All Wards                                 |
| <b>Reference Number:</b> | Pw09098te.top                             |

**SUMMARY**

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This report seeks Council approval to enter into an Agreement with DAScom Inc., to enable this telecommunications firm to install and maintain a “distributed antenna system” including small antenna and related equipment mounted on existing utility poles, fibre optic cables, conduit and ancillary plant in City of Toronto streets pursuant to the terms and conditions negotiated to address City interests.

**RECOMMENDATIONS**

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**Transportation Services recommends that City Council:**

1. approve entering into a Municipal Access Agreement with DAScom Inc. to authorize the construction, installation, maintenance and operation of a telecommunications network comprising a distributed antenna system on existing utility poles, fibre optic cables, conduit and ancillary plant in the City of Toronto public highways, generally under the terms and conditions as set out in this report and such other terms and conditions as may be satisfactory to the City Solicitor and General Manager, Transportation Services; and
2. direct that the agreement specifically include the following requirements:
  - a. that DAScom agrees that it will at all times ensure that the network is constructed, operated and maintained in accordance with:

- i) Industry Canada's CPC-2-0-3 ("Radio Communication and Broadcasting Antennae Systems", June 2007);
  - ii) The City of Toronto Telecommunications Tower and Antennae Protocol (as amended by City Council in January 2009); and
  - iii) The City of Toronto "Prudent Avoidance" Policy, respecting acceptable levels of radio frequency (RF) exposure (endorsed by City Council March, 2008); and,
- b. that DAScom Inc. shall also be required to consult with City Planning Urban Design Division staff and Transportation Services Public Realm Section staff, with respect to developing design aesthetics for any proposed pole attachments which are satisfactory to the City's Director of Urban Design and Transportation Services Director of Public Realm.

## **Financial Impact**

Entering into the proposed Municipal Access Agreement will not result in any direct financial costs to the City. The applicant will be responsible for any costs incurred by the City due to construction, installation, maintenance and operation of its plant in City streets in accordance with the City's usual permitting process.

## **DECISION HISTORY**

City Council, at its meeting of September 22, 23, 24 and 25, 2003, adopted, as amended, Clause No. 71 in Report No. 9 of the Policy and Finance Committee entitled "Supreme Court of Canada Decision – Leave to Appeal Application – Canadian Radio-Television and Telecommunications Commission (CRTC) Decision 2001-23 Terms and Conditions for Access to Municipal Property by Telecommunications Carriers." The Clause contained a confidential joint report (September 8, 2003) from the Commissioner of Works and Emergency Services and the City Solicitor, and resulted, among other things, in instructions to staff concerning discussions with telecommunications companies requesting changes to agreements with the City. This decision also provided the framework for staff to develop a template agreement to be used as a basis for discussions with new companies wishing to have access to City streets in the future. City Council has authorized a number of similar Agreements with companies over the past five years, based on this template model.

DAScom Inc. has approached the City to negotiate the terms of access to the municipal public highway. The firm is agreeable to the terms and conditions as discussed in the following which contain minor changes to the template provisions, as well as additional requirements dealing with the unique antenna equipment aspects of the proposal.

## **COMMENTS**

### **Company Background**

DAScom Inc., is a non-dominant Canadian telecommunications carrier, with pending CRTC registration. DAScom is owned by two Canadian telecom companies, Arizon Inc. and Communications and Cabling Contractors Inc., and an American company called Extenet Systems Inc.

DAScom is not a direct service provider, but facilitates the operation of multiple wireless carriers, including expected new entrants to the marketplace later this year, by providing common infrastructure. Its US shareholder Extenet is a leading provider of distributed antenna systems, with 23 active systems operating in nine states (California, New York, Texas, Michigan, etc.) and 10 more under construction. DAScom has networks currently under design in five Canadian municipalities.

### **Distributed Antenna System (DAS)**

Distributed antenna system architecture is comprised of three main elements: multiple remote communication “nodes” consisting of small antennas and low-power radio equipment attached to existing utility poles; fibre optic cable; and a central hub located in an existing building to house the end equipment. The system does not rely on large communication towers (which in fact are not permitted under the recommended MAA) or building mounted towers. The company indicates that this type of network provides precise, targeted wireless coverage, improved capacity utilization and spectrum efficiency in areas not accessible to standard micro cell transmitters.

The DAScom proposal involves the deployment of the network throughout all areas of the City and comprises approximately 730 nodes (over 90% attached to existing hydro poles, the remainder to existing streetlight or other utility poles; and about 690 km of fibre optic cable (about 630 km attached to existing poles and 26 km utilizing existing conduit with only about 34 km of new underground construction anticipated. To put the antenna network in context, staff estimate that there are well over 200,000 utility and streetlight poles in the City. In parallel with its negotiation of a MAA with City staff, DAScom advises it is also finalizing support structure agreements with Toronto Hydro and Bell Canada.

### **Tower and Antenna Protocol and Prudent Avoidance**

The network proposed for Toronto shall be designed, constructed and operated in full compliance with national safety standards for radio frequency (RF) exposure established by Health Canada’s Safety Code 6, as well as antenna siting procedures established by Industry Canada. The proposed installations are not subject to municipal consultation under Industry Canada’s procedures and thus are not subject to an application or public consultation under the City of Toronto’s Telecommunications Tower and Antenna Protocol.

DAScom has agreed to comply with the City's Prudent Avoidance Policy for Telecommunication facilities, which sets an RF limit of 1/100 of Safety Code 6.

The recommended MAA contains provisions to secure these commitments as noted later in this report.

### **Aesthetic Considerations**

Staff have raised the matter of aesthetic considerations of the pole-mounted equipment with the company. The company, in turn, has submitted material for review of the Urban Design Section of the City Planning Division and the Public Realm Section of the Transportation Services Division.

An illustration of DASCom's current equipment design is shown on Attachment #1 to this report. City staff have no concerns with the placement of overhead fiber optic cable and equipment on existing wooden Toronto Hydro poles. It is noted that approximately 80 percent of the network will utilize these types of poles. Staff remain concerned about the placement of overhead cable in locations where no existing overhead wires exist and the placement of equipment on decorative poles.

In this regard, DASCom has agreed to only place overhead cable where it currently exists. This will be reflected in the Municipal Access Agreement. They have also agreed to construct their network in phases. Their first phase will only cover the portions of the City where existing wooden Hydro poles currently exist. They will only construct future phases after further consultation about aesthetics with City staff.

### **Summary of Key Terms**

In light of the authority of the CRTC to permit access to, and use of, certain City property for telecommunications purposes and independent rights of utility pole owners to permit the attachment of this equipment, staff believe that it would be in the interests of the City to enter into an agreement with DAScom on the terms as set out in this report.

The standard Municipal Access Agreement proposed by staff for DAScom Inc., as with similar companies, includes the following provisions that establish the roles and responsibilities of the parties regarding work in the public highway and protection of the City's interests:

1. The standard term granted by the City for access to public highways is 15 years, with an option of renewal for a further five years by mutual consent.
2. The City will not at the present time charge the company a fee in the nature of a land based licence or lease fee for the use of the public highways during the term, unless in future it is permitted by law, including Provincial or Federal legislation and/or a future binding decision (CRTC, court), to do so, in which case, the fee shall reflect rates then charged by the City for the use of similar purposes in the public highways.
3. The company shall be obliged to pay all applicable taxes, levies, charges, etc.

4. All work done by the company within the public highway is subject to the City's standard requirements for persons doing construction or otherwise occupying the public highway (i.e., submission of permit applications, pre-approval of plans, issuance of permits, provision of security, warranty of temporary restoration, submission of as-built drawings, etc.). All work is to be done to the satisfaction of the General Manager in accordance with City policies.
5. The company shall, prior to construction, post financial security in the form of a letter of credit sufficient to secure payment of the estimated total cost of the repair and restoration of the public highways.
6. The company will participate in joint planning and co-ordinating processes to reduce disruption and damage to the public highways and at all times will be a member of a "locate" service.
7. The company shall pay all required permit and construction fees, including but not limited to the cost of permanent restoration carried out by the City, and acknowledges that the City is currently undertaking a study to identify any unrecovered costs, including pavement degradation and work around costs, incurred by the City as a result of the activities of persons doing construction within the public highways, including Canadian Carriers and that the City intends in future to impose a standard fee to recover such costs. The company has agreed to pay the City's additional reasonable work-around costs related to the repair, maintenance or construction of City facilities due to the presence of the company's plant.
8. The company agrees that in order to avoid disruption of the public highway, it shall make every effort to first establish whether another company has available support structure capacity which is, in the opinion of the General Manager, reasonable and feasible for use by the company. Similarly, where the company has excess capacity, it shall disclose such excess capacity to others and make it available on such terms as may be agreed. It is noted that by the nature of the network, being designed to serve multiple wireless service providers, disruption to the City's surface facilities by multiple digging will likely be reduced somewhat. The company also agrees, where space is available, to make every effort to enter into a sublease or other arrangement to utilize the Pipe System (decommissioned downtown high pressure water conduit owned by the City and leased/managed by MTS Allstream Inc.).
9. At the option of the City, prior to the commencement of any work, the company agrees upon request to install additional ducts on behalf of the City with the City paying the incremental cost incurred by the company with no mark-up for profit for such installation. The City would subsequently own such plant.
10. Any future relocation of the company's plant that may be required for a bona fide municipal purpose is subject to a sliding scale of cost allocation. The City would pay for relocations for the first three years after issuance of the permit, with the

company thereafter assuming an increasing share of the cost over time. After 10 years, 100 per cent of the cost of relocation is the responsibility of the company.

11. Insurance, including general liability, in the amount of \$10 million per occurrence, and “all risks” property insurance on a full replacement basis, is required in a form satisfactory to the City.
12. The company shall indemnify and save harmless the City with respect to any claims or losses incurred as a result of the construction, operation and maintenance of the network and the use of the public highways, except in the event of damage or injury due to the gross negligence or wilful misconduct of the City. The City shall not be liable for any damage to the network however caused where the company has failed to provide “as-built drawings” or accurate locate information as requested.
13. The agreement contains commercial provisions satisfactory to the City Solicitor and the General Manager, Transportation Services, including requiring the City’s consent for assignment of the agreement in the event control of the company changes, default provisions, termination provisions and related remedies.
14. The consent granted by the City is non-exclusive, applies on an “as-is” basis and does not convey a property interest in the public highways.

In addition to the above-noted standard provisions, which generally establish the regime for stand-alone fibre-optic cable and ancillary equipment in the public road allowances, the following additional provisions have been incorporated into the recommended MAA, recognizing the nature of the proposed wireless network.

15. In addition to permissions for a typical fibre-optic network, the MAA permits the deployment of a distributed antenna system network (wireless nodes or antenna and associated equipment) on existing utility poles (subject of course to the express agreement of the utility company owning the pole). As with all of the City’s MAAs, this permission does not extend to the construction of cell transmission towers or other above-ground structures.
16. The company agrees that it will at all times construct, operate and maintain the network in accordance with:
  - a. Industry Canada’s CPC-2-0-3 (“Radio Communication and Broadcasting Antennae Systems”, June 2007 (effective January 1, 2008));
  - b. The City of Toronto Telecommunications Tower and Antennae Protocol (as adopted by City Council January, 2009); and

- c. The City of Toronto “Prudent Avoidance” Policy, respecting acceptable levels of radio frequency (RF) exposure (endorsed by City Council March, 2008).
17. The company is required under the MAA to consult with City Planning Urban Design Division staff with respect to developing design aesthetics for any proposed pole attachments beyond existing wood poles with existing overhead plant which are satisfactory to the City’s Director of Urban Design.
18. The company agrees, despite anything else in this Agreement, that it shall only install overhead cabling where overhead cabling already exists (i.e. has not been moved underground) and that where the Company has plant attached to a pole(s) which is owned by the third party and it is proposed that the pole(s) be removed or replaced, the Company shall, at its sole cost, promptly remove and relocate its plant so as to allow the third party owner of the pole to remove the old pole(s) within six (6) months of the new pole(s) being erected.

The City Solicitor and staff of City Planning have participated directly in the negotiations and have reviewed this report.

## **CONTACT**

Andrew Koropeski, P.Eng.  
Director, Transportation Services  
Toronto and East York District  
Telephone: 416-392-7911  
Fax: 416-397-4007  
Email: [akoropes@toronto.ca](mailto:akoropes@toronto.ca)

David Oikawa  
Manager, Community Planning  
Toronto and East York District  
Telephone: 416-394-8219  
Fax: 416-394-6063  
Email: [doikawa@toronto.ca](mailto:doikawa@toronto.ca)

Gary Welsh, P.Eng.  
General Manager,  
Transportation Services

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Attachment 1 – Photos of Proposed City of Toronto Pole DAScom Telecom Installations

