



## CITY OF VANCOUVER

### ADMINISTRATIVE REPORT

Date: June 21, 2007  
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Meeting Date: July 24, 2007

TO: Vancouver City Council

FROM: Director of Information Technology in Consultation with the General Manager of Engineering Services

SUBJECT: Exchange agreement between the City and Bell Canada

#### RECOMMENDATION

- A. THAT the General Manager of Engineering Services and the Director of Legal Services be authorized to negotiate, execute and deliver on behalf of the City an exchange agreement with Bell Canada ("Bell") with a term of 20 years, whereby:
- the City grants to Bell a duct licence to permit Bell to install optical fibres in approximately 19.6 kilometres of City-owned telecommunication ducts; and
  - Bell grants to the City an indefeasible right of use of optical fibres owned by Bell in 19.1 kilometres of Bell's fibre optic network.
- B. THAT no legal rights or obligations will arise or be created by Council's adoption of Recommendation A unless and until all legal documentation has been executed and delivered by the respective parties.

#### GENERAL MANAGER'S COMMENTS

The General Manager of Corporate Services RECOMMENDS approval.

## COUNCIL POLICY

Execution of legal agreements by the Director of Legal Services and General Manager of Engineering Services with respect to access to City streets for utility purposes requires Council approval.

On July 30, 1996, when dealing with a report on Telecommunications Policies, Council approved a number of goals including one to ensure that the City maintains its authority to regulate equitable access by telecoms to City streets, secure valuable compensation for their use, minimize negative impacts associated with their use, and utilize them in a manner that furthers other telecommunications policy objectives.

## PURPOSE

The purpose of this report is to ask Council for approval to negotiate an exchange agreement with Bell. This agreement will authorize Bell to install optical fibre network through certain City-owned ducts. As compensation for such extension, the City will benefit through its right to use certain fibres in Bell's optical fibre network for its own telecommunications needs.

## DISCUSSION

Bell and the City have agreed in principle that there would be a mutual benefit in negotiating an exchange agreement which permits Bell to access City-owned ducts to install fibre optic cable. The agreement will save both parties the cost of building or leasing duct space.

The City proposes to grant Bell a licence to install optical fibre cable in approximately 19.6 kilometres of City duct as listed in the Appendix A. This will allow Bell to provide fibre optical service to Olympic venue sites for the 2010 games.

As compensation for the licence to install optical fibre in the City's conduits Bell will provide the City with the right to use 19.1 kilometres of optical fibres in Bell's network, extending the City's optical fibre network as listed in Appendix B. This extension of the City's fibre network will provide:

- Service to southeast False Creek to service City facilities at this site including the new community centre and the neighbourhood energy utility;
- Additional fibre capacity to the downtown core providing capacity for service to sites in the downtown core including existing and future City owned buildings, traffic cameras, and service to Olympic live sites;
- The creation of diverse fibre network links to Manitoba Yards and Parking Enforcement offices at 1125 Howe Street
- A link between the fibre networks servicing City worksites in the north-east quadrant of the City and the south-east quadrant of the City. This will provide a diverse fibre route to City worksites east of Fraser Street.

Although the City's fibre network has proven to be very reliable, and major fibre outages have been rare, the City has experienced outages resulting from fibre damage on occasion.

The use of diverse fibre routes has saved the City from major outages on a couple of occasions in the past. The new fibre network links in the proposed exchange agreement with Bell will help to improve the robustness of the City's network so that it is better able to withstand either natural disasters or accidental fibre cuts.

Under the terms of the proposed agreement Bell would provide to the City the right to use its optical fibre, as well as installation services and ongoing repair and maintenance, at no cost to the City. The market value of the optical fibre and installation services is estimated at \$344,000 (\$18/m). This agreement will provide to the City fibre along some routes where the City has no ducts. Constructing new ducts costs from \$20,000 to \$35,000 per city block, so the use of Bell fibre along routes where the City does not have ducts provides savings to the City. Staff estimates the conduit construction savings from this agreement at \$580,000.

The exchange agreement for the use of City-owned duct by Bell is non-exclusive, and Bell is required to install its cables in a way that will permit additional cables to be installed in such ducts in the future.

It is difficult to place a value on the City owned duct infrastructure, or on the value to Bell of this agreement. The alternative available to Bell is to use Telus duct. Telus is required by the CRTC to make surplus ducts available at an annual rate of \$0.95 per metre. Because of its structure and topology, City duct is probably less valuable than Telus duct for most commercial purposes. On the other hand, Telus (as an Incumbent Local Exchange Carrier (ILEC)) can charge make-ready fees (in addition to the \$0.95 per metre annual rate) and may not have surplus duct. At a rate of \$0.95 per metre, the 19.6 km extension proposed could command an annual rent of \$18,000, or \$360,000 over the 20 years of the proposed agreement. As the City derives an immediate construction benefit estimated at \$580,000, fibre installation savings of \$344,000, and gets network repair and maintenance included for the life of the exchange agreement, Staff feels that the City is receiving fair compensation for use of its duct by Bell.

In addition to this exchange agreement, City staff is currently working with Bell to resolve issues that have arisen from the termination of a previous agreement with Group Telecom, a company that has become a subsidiary of Bell. Termination of the previous agreement included payment of some outstanding monies to the City and an exchange of fibre assets that were to be given to the City under that agreement. While work on the termination issues is going well, staff intends to make execution of the exchange agreement described in this report subject to resolving the termination issues with respect to the Group Telecom agreement to the satisfaction of the General Manager of Engineering Services and the Director of Legal Services.

## ALTERNATIVES

As an alternative to the exchange agreement with Bell, the City could install its own optical fibre backbone using either internal resources (the City's Engineering Services' Traffic and Electrical Operations branch) or sub-contracting part of the work. While outright ownership might be seen as desirable the costs to the City would be \$922,000 plus the cost to provide repair and maintenance, 7 days per week, 24 hours per day.

The Bell arrangement offers the benefits identified at no cost to the City.

## FINANCIAL IMPLICATIONS

There are no financial implications.

## CONCLUSION

Deploying optical fibre to City facilities offers significant financial and operational benefits and is clearly the telecommunications approach of choice. Negotiating an exchange agreement with Bell offers the City the most cost-effective way of realizing this goal.

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## Appendix A

### City Duct to be used by Bell

Duct lengths (total 19.6 km) are approximate.

<i>Segment No.</i>	<i>Segment Start</i>	<i>Segment End</i>	<i>Distance (m)</i>
1	41 <sup>st</sup> Ave & West Blvd	Hillcrest Stadium	4820
2	West Blvd & 41 <sup>st</sup> Ave along Granville	Oak St Bridge	3850
3	10 <sup>th</sup> Ave and Yew St	10 <sup>th</sup> Ave and Trimble St	3690
4	ECOMM at Hastings	PNE at Renfrew	1270
5	Renfrew at Pacific Coliseum	Pacific Coliseum at PNE	145
6	Cambie & 8 <sup>th</sup> Ave North to 1 <sup>st</sup> Ave	1 <sup>st</sup> Ave and East to Quebec St	1390
7	Pacific Blvd and Quebec St	Pacific Blvd and Granville St	2210
8	Hwy Control Center at Hastings	ECOMM at Hastings	235
9	Georgia St and Denman	Vault 3 at Lost Lagoon Causeway	493
10	West Blvd & 41 <sup>st</sup> Ave	Carnarvon & 39 <sup>th</sup> Ave	1482

**Appendix B****Bell fibre segments to be used by City**

Fibre lengths (total 19.1 km) are approximate.

<i>Segment No.</i>	<i>Segment Start</i>	<i>Segment End</i>	<i>Length</i>
1	5 <sup>th</sup> Ave & Main	3585 Gravely - VANOC Headquarters	7032
2	PNE at Renfrew	Fire Hall 15	4790
3	1125 Howe Street	Drake and Seymour St	322
4	Manitoba Yard	Marine Dr & Oak St	2150
5	ECOMM at Hastings	3585 Gravely - VANOC Headquarters	1230
6	Cambie & 8th Ave	1st Ave and East to Quebec St	1390
7	Pacific Blvd and Quebec St	Pacific Blvd and Granville St	2210