# Request for Decision City Council



Type of Decision										
Meeting Date	December 15, 2005				Report Date		November 25, 2005			
Decision Requested	Х	Yes	No	7	Priority		High	Low		
	Direction Only			Type of Meeting	Х	Open	Closed			

## **Report Title**

**Core Network Switch Replacement** 

## Policy Implication & Budget Impact

This report and recommendation(s) have been reviewed by the Finance Division and the funding source has been identified.

No budget impact as the costs will be funded from the 2005 Administrative Services Capital Envelope and the Computer Reserve Fund.

### Recommendation

That Council approve the Bell proposal for the implementation of the new Core Network Switch in the amount of \$240,963.76 to be funded from 2005 Administrative Services Capital Envelope (\$158,000) and from the Computer Reserve Fund (\$82,963.76).

That Bell Canada be selected as the vendor of record for Core Network Switch Hardware.

Background Attached

**Recommendation Continued** 

**Recommended by the Department** 

Caroline Hallsworth

**Executive Director Administrative Services** 

Recommended by the C.A.O.

Mark Mieto

Chief Administrative Office

Title: Core Network Switch Replacement

Date: December 15, 2005

**Report Prepared By** 

Bruno Mangiardi Chief Information Officer **Division Review** 

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Name Title

### **Background:**

The IT Department has been working for the past year and a half planning and researching a solution for the replacement of the City's main Network Core Switch. The Core switch is the heart of voice and data communications for the entire city. It routes data and voice traffic within the City of Greater Sudbury allowing intercommunication between all facilities, and between those facilities and the outside world. It currently supports and routes traffic from approximately 2500 network devices while providing high availability and high bandwidth services for all of our computing and voice needs. Every PC throughout the city relies on this switch for communications.

The original core switch was installed as part of the SureNet initiative in 1998 prior to amalgamation. It is now well over the 5 year life expectancy for the product. We have had many problematic issues with the core switch for over a year. Bandwidth restrictions required reconfiguring the city network 2 years ago as a temporary measure to offload the internal Tom Davies Square traffic. This temporary configuration is still in use. Any failure within the central core switch has the impact of taking down the entire city network. The most tangible effect being the loss of water treatment control and monitoring equipment required to ensure proper operation. As well, every PC and VOIP telephone will also be affected. Fiber optic backbone connections tie directly to this switch, thus failure of central components causes a complete loss of network connectivity. The new switch configuration has buil redundancy to keep communications active in the event that a central component should fail. The new switch also adheres to modern and emerging standards allowing us to divide and segment our network to properly protect resources and systems from public or rogue users not authorized to be connected to our systems. Bandwidth capabilities will adequately carry us through its complete lifecycle.

This situation is now critical in that the core switch must be replaced. The old system was not designed to handle the loads we now have due to amalgamation, the increased demands for the network and the new technologies that are being implemented.

An RFP was issued July 29 2005. We had five respondents. One was disqualified as the bid form was not properly completed, one was eliminated as it did not meet our basic requirements. The last three vendor proposals were reviewed and evaluated. All three met our requirements. A last and final offer was requested from them all. The bids (including taxes) received were as follows:

	Price	Score
1. Bell Canada	\$240,963.76	94
2. WAN Group	\$252,668.16	86
3. Albert White	\$345,179.97	91

The proposal from Bell scored the highest and was the lowest price.

Title: Core Network Switch Replacement

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We recommend that the Bell Canada proposal be selected as it meets all requirements, had the highest score and is the lowest price. Funding is available from our approved 2005 capital budget envelope for Administrative Services (\$158,000), with the balance coming from the Information Technology Reserve Fund which is used for these purposes.

Supplies and Services has reviewed and been involved with all aspects of this process and the selection is in keeping with the Purchasing By-law. Finance has also reviewed this process to ensure adequate funds are available.

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