CANADIAN LOCAL TELECOM SERVICES MARKET REPORT

OVERVIEW



2004 EDITION

IIIIIIII NBI / MICHAEL SONE ASSOCIATES

Local Telecom Services in Canada A Market in Transition

INTRODUCTION

Two-thousand-and-four will most likely be remembered as the year that the Canadian Local Telecom Services Market entered a new, more vigorous phase of competition. The most significant development in local competition since the CRTC decision that allowed it (Decision 97-8, May 1, 1997) occurred very early in the year, with the launch by Primus of IP-based local voice telephone services (VoIP). Since then, numerous additional companies have launched their own services; and the list keeps growing.

The significance of VoIP is that, although it uses an ILEC- or cable company (cableco)-owned loop (either copper wire or coaxial cable) to reach the customer, its access to that loop is not controlled by the owning entities. Rather, the access is gained over a customer's broadband connection via the public Internet. As such, the cost and delay in establishing the service are significantly reduced and barriers to entry are essentially eliminated.

While the success of current VoIP providers, many of whom lack two of the triple play services of phone, high-speed Internet and TV, is not necessarily assured, the emergence of the technology, without doubt, has completely redrawn the landscape of local telecom competition in Canada enhancing the potential of almost every segment of the industry. This includes the major cablecos that have all announced plans to enter the market using IP- based voice technology as part of an ongoing battle with the ILECs. Thus, the ILECs' position in the local telephone market is threatened in a way that they have yet to experience in their 100-year+ history.

While the ILECs have historically held market power in this area, in NBI/Michael Sone Associates' opinion this power is beginning to erode at a much faster rate than it did in

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the first 7.5 years of local competition. This could lead one to the conclusion that the CRTC's vision of facilities-based competition was not in concert with the financial realities of the market and a totally different model, based on low-cost, shared access, seems in actuality what is required to create a competitive local telephone market.

Figure 1 depicts the expected decline in ILEC share in both the residential and business wireline access sectors due mainly to the advent of VoIP and the entry of numerous new competitors.

In the residential area, ILEC wireline (including VoIP) share is forecast to fall to 83.7% by 2007 from 98.5% in 2002, representing an average annual loss to the ILECs of 4% (CAGR) and a 10-fold gain in Competitor share over the same period. ILEC wireline (including VoIP) business local access share is forecast to decline to 76.6% by 2007 from 88% in 2002 (a CAGR of -5.4%), with Competitor share almost doubling over the same five years. ILEC share in total is forecast to fall by 13.6% between 2002 and 2007 to 81.2% (a CAGR of -4.4%).

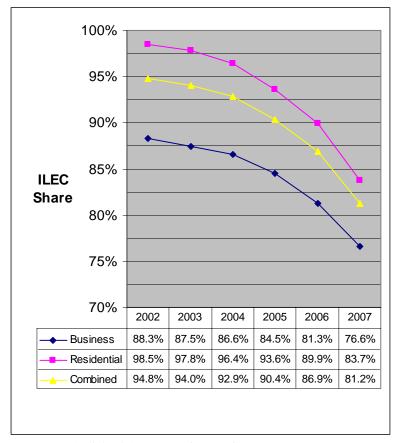


Figure 1: ILEC Share of Wireline Local Access Lines, 2002-2007

Source: NBI/ Michael Sone Associates estimates

At the same time and over the same period, total residential and business NAS are expected to decline by compounded annual rates of 0.8% and 2.7% respectively (see Figure 2). In total, the number of NAS is expected to fall from 20.4 million at the end of 2002 to 18.9 million by end-2007, a CAGR of -1.5%. ILEC NAS is, therefore, expected to fall faster than the industry as a whole. Aside from the effects of traditional wireline competition, NAS is under pressure from the continued abandonment of second lines used for dial-up Internet in favour of high-speed Internet access, the substitutional effect of wireless replacement¹ and softer demand for business lines. In this last category, driving the declining growth is the migration from Centrex to ISDN Primary Rate

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¹ We estimate that the number of wireless subscribers that no longer use landline service will be in the range of 500,000-700,000 by year-end 2004, or between 3.7% and 5.1% of all residential phone lines (including wireline plus these wireless-only users).

Interface (PRI) that results in fewer lines per CPE station and the continued movement from TDM to IP-based PBX solutions with their consequent efficiency gains.

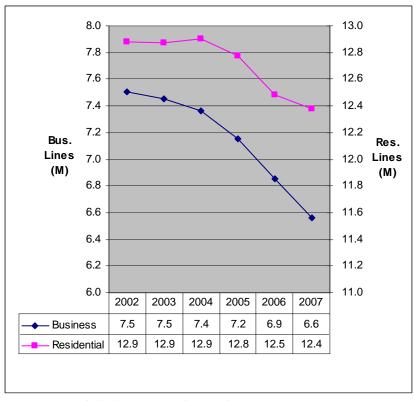


Figure 2: Wireline Local Access Lines by Segment, 2002-2007

Source: NBI/ Michael Sone Associates estimates

It is interesting to note that while, generally, rivalry is most apparent in large population centres, gains by Competitors are not limited to the biggest cities. As depicted in Figure 3, some of the most contentious cities are smaller locales. In fact, four of the top five cities in terms of Competitor share gains are Halifax, London, Hamilton and Kitchener (Toronto is actually third behind Halifax and London).

Halifax London Toronto Hamilton Kitchener Montreal Vancouver Windsor Calgary Oshawa Ottawa-Hull Quebec City St Catharines-Niagara Falls Edmonton Victoria Winnipeg Saskatoon 70% 75% 80% 85% 90% 95% 100% **ILEC Share** ■ Business ■ Residential

Figure 3: ILEC Share of Wireline Local Access Services by City, 2004

Source: NBI/ Michael Sone Associates estimates

VoIP as Market Transformer

The advent of VoIP is enabling independent companies such as Primus, Yak, Vonage, BabyTel and Comwave to enter the market with fewer barriers and will allow the cablecos to finally enter the market, after years of speculation. The proliferation of new players that will result from the introduction of this disruptive technology is the catalyst for the expected significant ILEC share losses discussed above.

Residential VoIP providers fall into three basic categories:

- Resellers: Included in this are companies unaffiliated with either ILECs or cablecos that use the customer's existing broadband Internet connection for access. This category can be subdivided further into:
 - a. Established companies, such as Sprint, Primus, YAK and AOL, that have a long history of providing telecom and/or Internet access services along with a significant customer base; and
 - b. Entrants, such as Vonage and BabyTel, whose main raison d'être is VoIP;
- 2. ILECs: Although almost none of the ILECs has launched residential VoIP services either in- or out-of-territory (the only exception being Navigata, a SaskTel subsidiary that offers VoIP services in western Canada except for Saskatchewan), it is widely expected that most of them will, at least outside their territory. Exactly when and to what extent deployment will occur hinges on the timing and content of the CRTC's anticipated decision with respect to the ongoing proceeding on regulation of VoIP services in Canada (Public Notice CRTC 2004-2), expected in the first half of 2005. Our forecasts assume that the Commission will adhere to its preliminary view and not forbear from regulating the ILECs' interritory VoIP services, which will in turn result in the ILECs launching VoIP only outside their home territories;
- 3. <u>Cablecos</u>: Except for EastLink, all of Canada's major cablecos have announced plans to launch local services by mid-2005 over their own infrastructure using VoIP technologies. Their strategy, which differs markedly from those in the other two categories, is to complete their triple play offering with the addition of phone service and, thereby, compete squarely with the ILECs on their own turf.

We expect that between them, all VoIP providers will attract over 1.1 million residential subscribers by 2007 (up from about 29,000 at the end of 2004), or about 9% of the total

residential wireline sector. By 2007, cablecos are expected to be serving 53% of VoIP users, the ILECs 27% and the balance about 20%. (See Figure 4.)

53% 2007 27% 20% 52% 2006 21% 27% 49% 2005 17% 34% 6% 2004 94% 100 200 300 400 500 600 700 **Subscribers** (000)2004 2005 2006 2007 2 590 ■ CableCos 106 273 37 299 ■ ILECS and Affiliates 111 Other 27 74 139 226

Figure 4: Share of Wireline VoIP Residential Subscribers by Industry Segment, 2004-2007

Source: NBI/ Michael Sone Associates estimates

Business IP voice services are currently offered by the ILECs, as well as others nationally, with the vast majority of lines provided using ISDN PRI facilities to IP-enabled CPE. The ILECs have also launched hosted, Centrex replacement IP voice services such as Bell's MIPTS and Telus' IP Evolution, which are expected to gain traction by mid-2005. VoIP resellers as well as the cable companies are expected to

provide services to the small business sector starting with SOHO and expanding from there as the technology and service develop. Business VoIP lines are expected to increase from 223K in 2004 to 759K in 2007 (or about 12% of the business wireline segment), with the ILECs holding 81% of VoIP lines, followed by the cablecos at 11.3% and others with 7.5%.

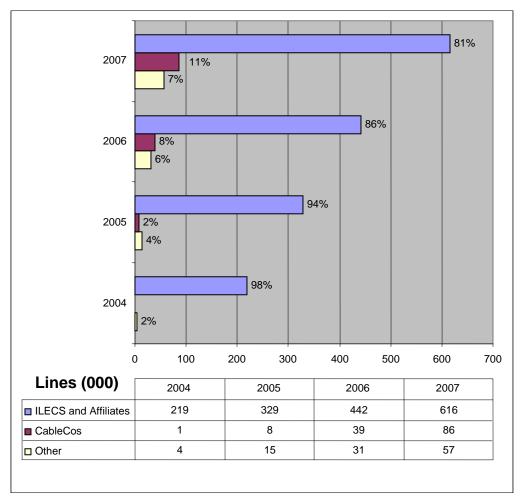


Figure 5: Share of Wireline VoIP Business Lines by Industry Segment, 2004-2007

Source: NBI/ Michael Sone Associates estimates