CANADIAN LOCAL TELECOM & VoIP SERVICES MARKET REPORT

Overview

2005 EDITION

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Local Telecom & VoIP Services in Canada

The Arrival of Meaningful Competition

While Canada's telecom regulator, the CRTC, opened the local telephone service market to competition in 1997 (with Decision 97-8), it took eight years for serious competition to materialize. A confluence of factors emerged in 2004 that set the stage for the competitive environment in which Canada finds itself in 2005.

First, VoIP service over third party provided high-speed Internet access connections (commonly referred to as "over-the-top" or "free riders", and within this report as “pure play VoIP services” or simply as “VoIP providers”) came of age. The technology that allows voice to be transmitted over the Internet via a customer-owned gateway device had been in test mode as far back as 2001. It wasn't until 2003 that the technology was considered sufficiently sound for mass-market consumption and only in 2004 did service come to Canada with the launch by Primus of its VoIP offering in January of that year. 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. As such, the cost and delay in establishing the service are significantly reduced, and technical barriers to entry are essentially eliminated.

The second major factor that has led Canada to a heightened level of competition is the entry by the cablecos into the local telecom market. Although promised as imminent by cableco executives on a regular basis over the last decade or more, participation by these companies in local telephony was delayed until now due to both the technology and the business cases being “works in progress”. However, with U.S. cable firms launching successful services using DOCSIS Packet Cable technology in 2003 and 2004, Canadian firms decided the time was right for them to get into the market as well. As such, all of the major Canadian cablecos had launched by mid-2005, with an emphasis (not surprisingly) on bundling TV, Internet and, the last piece of the triple play puzzle, local

phone service. Some cablecos also compete on a fourth flank – wireless services and yet others (Shaw to be specific) provide security as a fifth service into the household.

While both the pure play VoIP providers and the cable companies use IP voice technologies for the provision of their respective services, the similarity ends there. Each of these segments claims superiority over the other; the cablecos stress the equivalence to ILEC service and quality, with the ability to use all of the home's extensions on one line (unlike pure VoIP service which works only at one's computer) and to provide fully featured E911. In addition, the service functions even when one's Internet connection is down and typically includes battery backup of eight hours duration in case of a power outage, none of which is true for pure-play VoIP services.

The VoIP players, on the other hand, stress the compact nature of the customer premise equipment, the list of standard features as well as the portability of the service, which makes it attractive to students, heavy travelers and those on a tight budget. This segment generally promotes its service as a convenient and economical second line or as a way of being reached at one's local number even while traveling internationally. Even so, most companies report that a majority or at least a significant minority of users are porting their existing numbers to the service, an indication that many, in fact, are using VoIP as their "lifeline" service.

It is interesting to note that companies that offer both traditional circuit switched telephony as well as VoIP service (e.g., Primus, CallNet {now Rogers Telecom} and FCI Broadband) all seem to emphasize the circuit switched variety over VoIP. In fact, CallNet, which launched its VoIP service in June 2004, has never really promoted it and as Rogers Telecom continues to sell its traditional product almost exclusively. We expect that this has to do with the fact that these companies are positioning their services as first line replacement and must provide all of the advantages inherent to a "lifeline" service. The traditional technologies are more suitable for this from a maturity and stability standpoint than is VoIP, for the reasons given above.

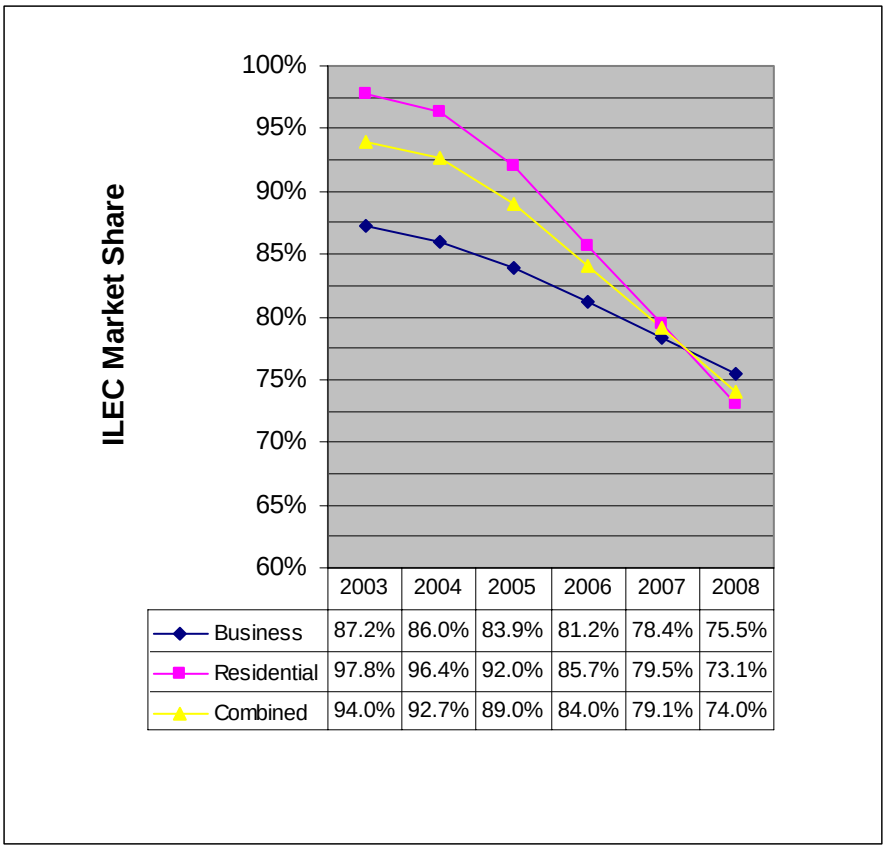
As the figures presented in this report show, the ILECs -- although still powerful -- are set to begin losing market share at a much faster rate starting in 2006 than they did in the first seven years of competition. The CRTC's vision of facilities-based competition, in light of these developments, has come into question. The fact that the bulk of market share losses will be caused mainly by facilities-rich cable companies does not necessarily negate this contention. Like the ILECs, the cablecos were permitted to build their infrastructures, customer bases and healthy cash flows under monopoly conditions, a privilege not accorded any of the dozen or so failed CLEC entrants. Therefore, one can conclude that the fact that they now are poised to successfully compete in the local telecom market using their own facilities is not in fact a vindication of the CRTC's approach. Aside from the ILECs and the cablecos, the only other players with an opportunity to succeed are those that operate on a resale basis (e.g., Primus) or that provide over-the-top VoIP services. Since the acquisition by Rogers of CallNet, the number of facilities-based residential service competitors aside from the cablecos has dwindled to just one of whom we are aware – FCI Broadband.[1]

Figure 1 depicts the expected precipitous decline in ILEC market share in both the residential and business wireline access markets and overall.

In the residential sector, ILEC market share is forecasted to fall to 73.1% by 2008 from 97.8% in 2003, representing an average annual loss to the ILECs of 6.6% (CAGR) and average growth of 64.1% for competitors over the same period. ILEC business wireline local access market share is forecast to decline to 75.5% by 2008 from 87.2% in 2003 (a CAGR of -2.3%), with Competitor share growing by an average annual rate of 14.5% over the same period.

[1] Primus also uses leased loops to provide residential service. However, it does so on a resale basis, leasing loops from Allstream, which in turn leases from the ILECs.

Figure 1: ILEC Share of Wireline Local Access Lines, 2003-2008



	2003	2004	2005	2006	2007	2008
Business	87.2%	86.0%	83.9%	81.2%	78.4%	75.5%
Residential	97.8%	96.4%	92.0%	85.7%	79.5%	73.1%
Combined	94.0%	92.7%	89.0%	84.0%	79.1%	74.0%

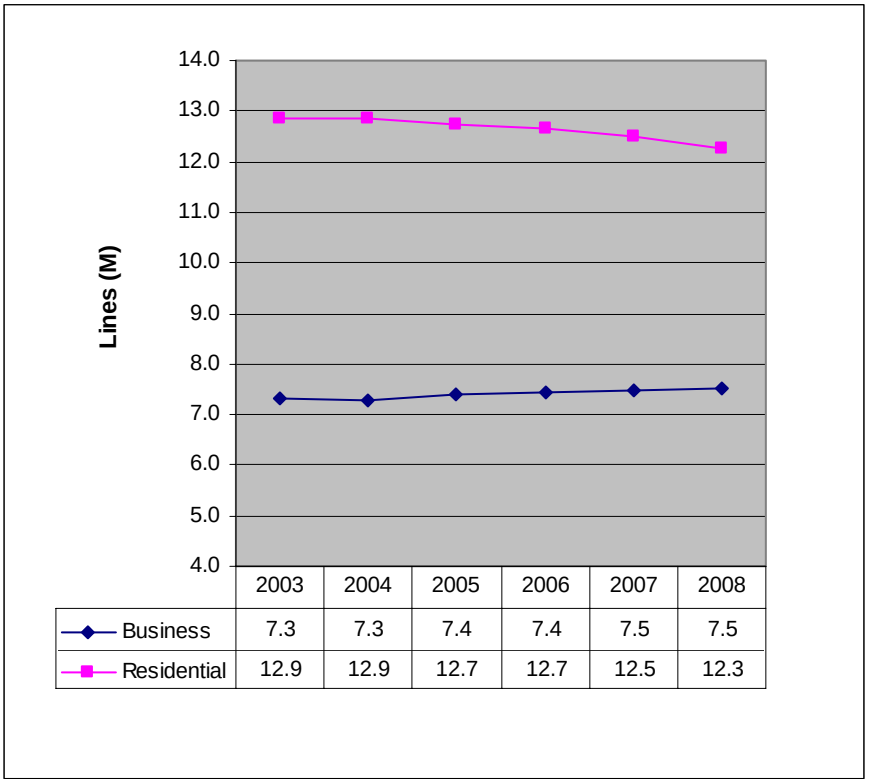
Source: NBI/ Michael Sone Associates estimates

Total market NAS is expected to change very little in the 2003-2008 period. Overall residential NAS is expected to decline by a compounded annual rate of 1% and business NAS to grow by a moderate rate of 0.5% over the same period (see Figure 2). In total, the number of lines is expected to fall from approximately 20.2 million at the end of 2003 to about 19.8 million by end-2008, a CAGR of -0.4%. ILEC residential NAS is, therefore, expected to fall faster than the market as a whole due mainly to continued abandonment of second lines used for dial-up Internet in favour of high-speed Internet access and wireless replacement, with the former trend leveling off in terms of intensity and the latter heating up.

Business lines are seeing moderate increases due to slight growth of the market, stemming mainly from the small business sector, which is experiencing a resurgence in demand for lines from new start-ups as well as from growth of existing firms. The net

result is that ILECs are experiencing moderate business line declines (2%-3% on average) year over year even while competitors are experiencing fairly healthy growth.

Figure 2: Wireline Local Access Lines by Segment, 2003-2008

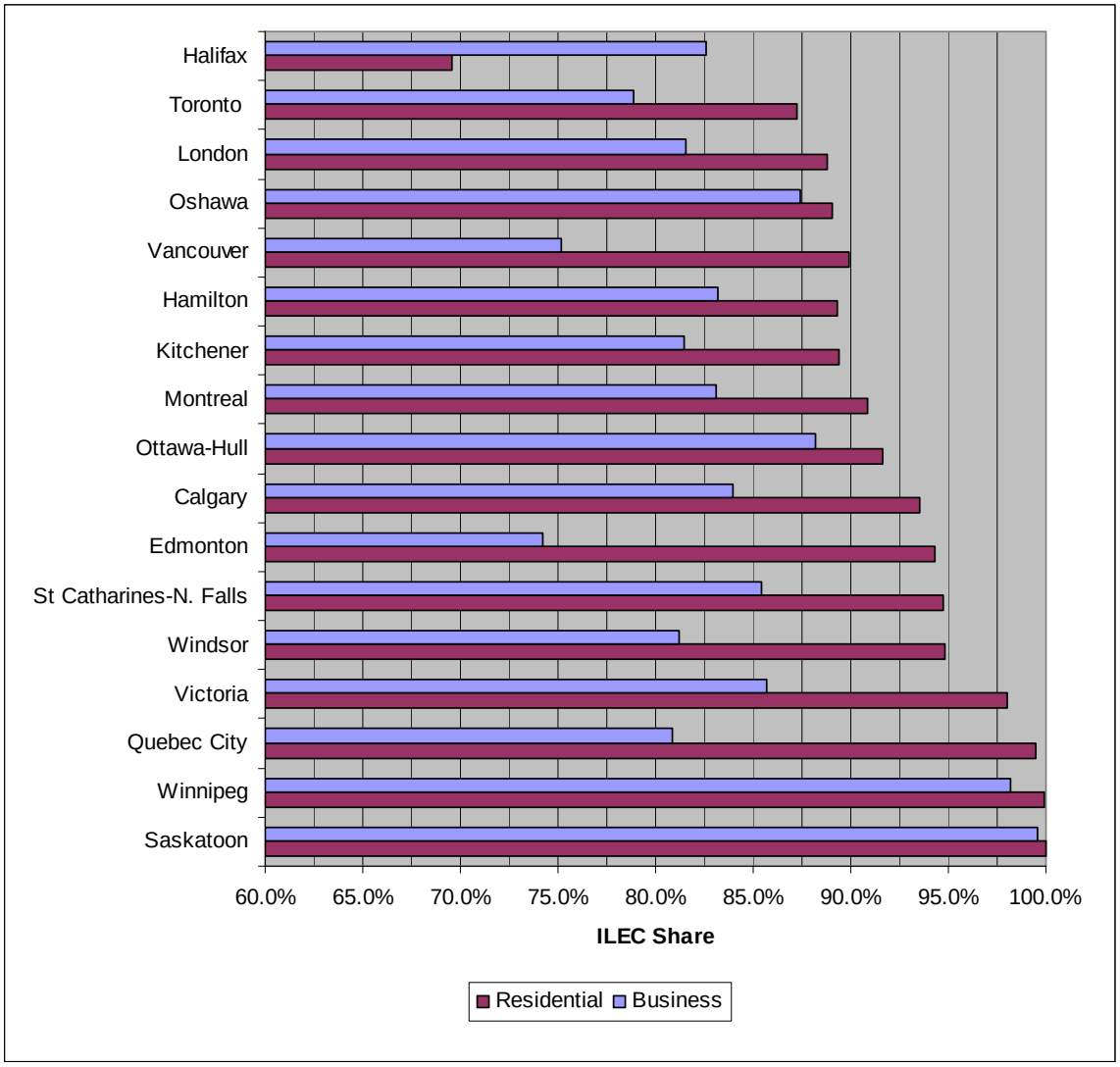


	2003	2004	2005	2006	2007	2008
Business	7.3	7.3	7.4	7.4	7.5	7.5
Residential	12.9	12.9	12.7	12.7	12.5	12.3

Source: NBI/ Michael Sone Associates estimates

Gains by Competitors are not limited to the largest cities. As depicted in Figure 3, some of the most contentious cities are smaller locales. In fact, four of the top six cities in terms of Competitor market share gains are Halifax, London, Hamilton and Oshawa.

Figure 3: ILEC Share of Wireline Local Access Market by City, 2005



Source: NBI/ Michael Sone Associates estimates

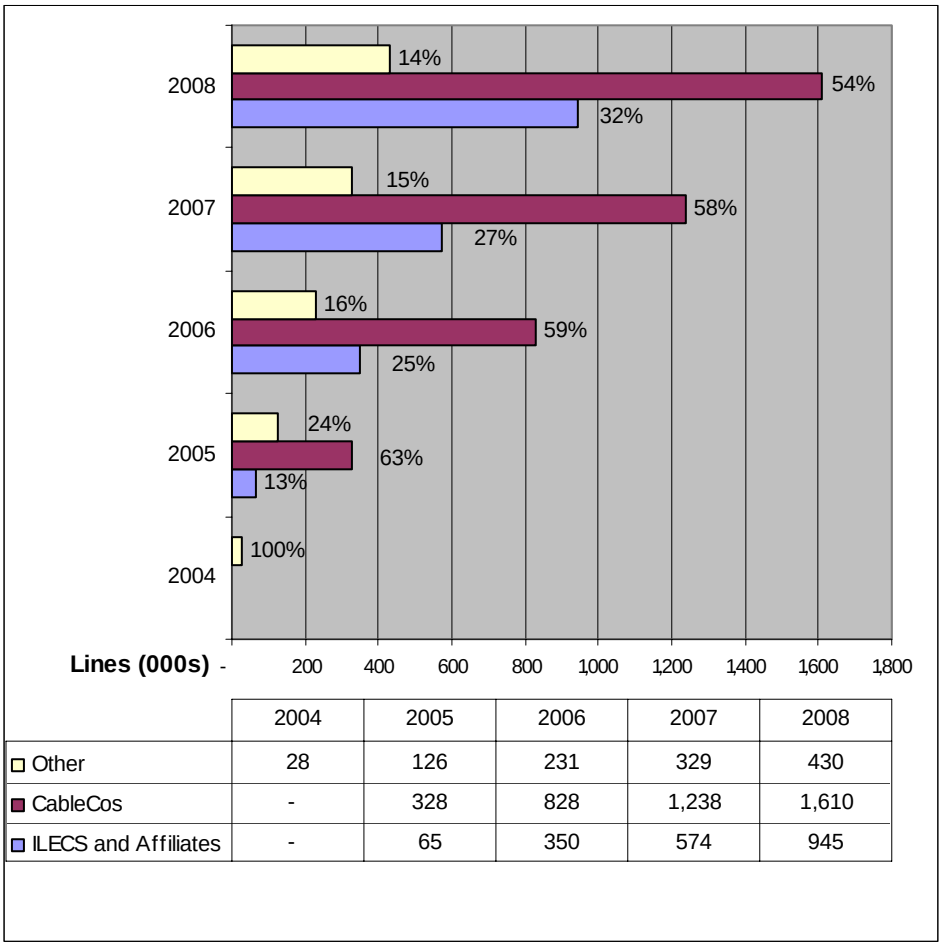
VoIP - Leading the Way to a Competitive Market

Numerous companies have entered the local services market through the use of VoIP technology. These include companies such as babyTel, Comwave, Yak, Vonage, AOL Canada, VoIP.net and the cablecos, among others. Primus and FCI Broadband are examples of companies that offer local services using traditional technologies either on a facilities basis or through resale and have launched their own VoIP services. As for the

ILECs, Bell Canada launched its consumer VoIP service initially in the Spring of 2005 (with a full launch in August) and Navigata (a SaskTel subsidiary) in 2004, while Telus, MTS and Aliant have yet to launch their own residential VoIP services.

We expect that between them, the ILECs, cablecos and other VoIP providers will attract close to 3 million residential subscribers by 2008 (up from about 518K at the end of 2005), or about 24% of the market. At that time, cable companies are expected to be serving 54% of VoIP users, the ILECs 32% (as we expect that they will move very aggressively to retain market share in a potentially forborne environment) and the balance about 14% (see Figure 4).

Figure 4: Share of Wireline VoIP Residential Subscribers by Industry Segment, 2004-2008

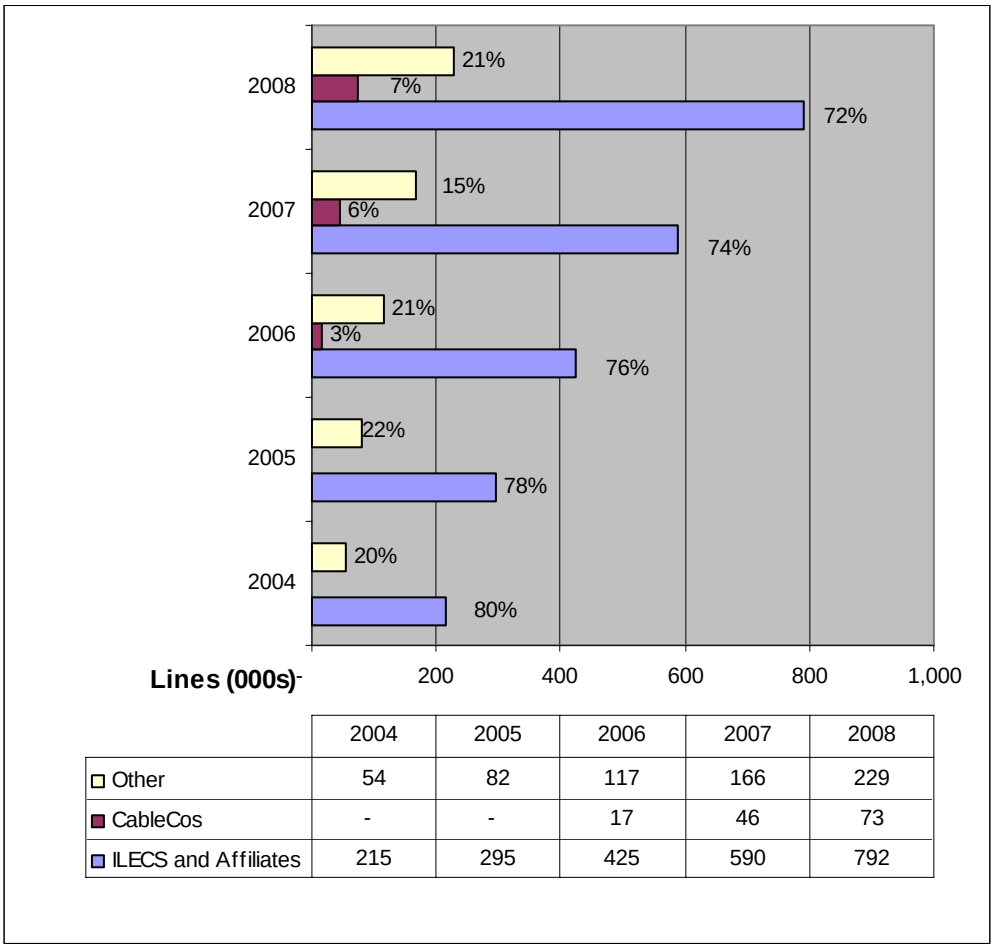


	2004	2005	2006	2007	2008
Other	28	126	231	329	430
CableCos	-	328	828	1,238	1,610
ILECS and Affiliates	-	65	350	574	945

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 network-based, Centrex replacement IP voice services, which have yet to capture significant market (we forecast fewer than 10,000 lines by end-2005). VoIP providers and the cable companies are now or are expected in the future 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 269K in 2004 to 1,093K in 2008 (or about 15% of the market), with the ILECs holding 72% of VoIP lines, the cablecos 7% and others (which includes Allstream) 21%.

Figure 5: Share of Wireline VoIP Business Lines by Industry Segment, 2004-2008



	2004	2005	2006	2007	2008
Other	54	82	117	166	229
CableCos	-	-	17	46	73
ILECS and Affiliates	215	295	425	590	792

Source: NBI/ Michael Sone Associates estimates