



harmony**mobile**

Consultation on a Framework to Auction Spectrum in the 2 GHz Range including
Advanced Wireless Services
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Response to Comments by
Harmony Mobile Networks

Bell Rogers and Telus claim that they require additional spectrum to provide 3G services and are not "stockpiling" or "hoarding" spectrum. Yet, both Bell and Telus both are currently not utilizing 1.9 GHz mobile spectrum within the GTA (Greater Toronto Area).

"Bell's acquisition of AWS spectrum is a natural step. Historically, Bell has used its spectrum prudently – most recently leveraging developments in the CDMA 2000 technology platform to deliver a number of world-first implementations in 3G data connectivity, location-based services and mobile broadband wireless access."
- Bell

"There is more spectrum capacity licensed per carrier in Canada compared to the US. US carriers often serve much larger and more dense markets with less spectrum than their Canadian counterparts."
- Lemay Yates

Bell, Rogers and Telus all state that successful commercial roaming arrangements exist between Canadian carriers. Can Bell or Telus provide any examples of non-incumbents with such arrangements? Can Rogers provide an example between Canadian GSM carriers?

Bell, Rogers, Telus and others provide evidence that Canadian carriers provide an ARPM (Average Revenue Per Minute) of around 11 cents. High per minute toll (long distance) charges of 20 to 30 cents per minute when applied to higher percentage of toll calls for subscribers that use their mobile phones in rural and remote, make the effective ARPM much higher for such customers.

Harmony Mobile notes that in extensive debate on the degree of competition that exists in the Canadian wireless industry, little or no economic data nor economic justification was presented by Bell, Rogers, Telus or SaskTel in regard to the disparity in ARPM between urban and rural wireless users.

Harmony Mobile further notes that ClearNET once offered a very reasonable package that included not only Canadian LD but calling to the USA, UK, European Union, Japan, Hong Kong and Australia. This package quickly disappeared under Telus' ownership. Fido's LD rate of 10 cents per minute doubled to 20 cents per minute when Fido was acquired by Rogers.



Bell, Rogers, Telus or SaskTel all present arguments against non-facilities based competition and attempt to infer that such competition was a failure, but in Canadian wireline telecommunications a healthy mix of facility and non-facility based competition has provided Canadian consumers with a choice of:

- * long distance rates, some providers being as low as 1 cent per minute (retail) across Canada
- * terminal equipment
- * messaging services
- * call routing services

Harmony Mobile notes that Canadian wireless service providers will not only refuse to provide equal access trunking connections, but also messaging and other interfaces that are freely available in the wireline industry.

Bell, Rogers and Telus point to an extensive and successful MVNO industry occurring in Canada, then what is to explain, other than excessive wholesale rates by it's underlying provider Bell, why PC Mobile would suggest to customers, on it's website, to use a separate calling card to place LD calls while using PC Mobile service?

"To save money, use PC prepaid long distance cards with your PC mobile phone. You can call long distance within Canada and the USA and to over 200 countries around the world. In Canada, with these cards, you will pay the standard 20¢/min local airtime rate plus only 4.0 ¢/min long distance - a total of only 24.0 ¢/min."
- PC Mobile

http://mobile.presidentschoice.ca/edealinv/servlet/ExecMacro?ctl_nbr=3910&nurl=static/RateAndCoverage.v
m

Rogers has commented on the high cost of customer acquisition caused primarily by high handset subsidies. Are users that desire only basic voice and data services cross-subsidizing multi-media handsets to assist in the incumbents own media businesses? Two of the national incumbents, Bell and Rogers, are affiliated with broadcast undertakings and Telus provides content under the "Spark" brand.

The Incumbents are not providing Equal Access, and in most cases do not provide proper ANI (Automatic Number Identification) or CLID (Calling Line Identification) to calls placed to toll free numbers, thus creating a barrier to APLDS (Alternative Providers of Long Distance Service) in offering an alternative to high LD rates for wireless users in rural Canada

APLDS providers currently cannot provide any relief for toll (LD) charges on inbound calls - although there are huge technical hurdles to overcome in provisioning this, such relief can be easily provided by offering wholesale "tandem aggregation" charges to APLDS for resale to the retail wireless customers

Comments stating that wireless penetration in EU countries has been overstated due to individuals using multiple SIM s to avoid high roaming rates. Harmony Mobile observes that use of multiple SIM s also occurs in Canada, visitors to Canada are purchasing SIM s to avoid high roaming rates charged by their home wireless providers.



Almost all Canadian MVNOs in Canada are directly or indirectly controlled by the incumbents, the only independents being:

PC Mobile
Harmony Mobile
7-11
Sears
Cityfone

Bell and Telus both refuse to activate devices, though technically compatible with their CDMA networks and approved for use in Canada that are not sold by them and Rogers, through MVNO agreements prevent MVNOs from marketing new devices (i.e. devices not sold by Rogers or Rogers affiliates) without a slow and expensive "approval" process. In the USA, the Carterphone decision has opened up wireline terminal attachment and in Canada, Triguilid Communications -vs- Bell Canada has done likewise for wireline in Canada, though ironically the case concerned the attachment of direct dial equipment to Bell Canada's VHF based mobile telephone service.

Wireless service has surpassed wireline residential service in Canada, yet Canadian wireless consumers only have a choice of "A thru F" while wireline consumers can pick a package from a major player or mix 'n match from a large variety of vendors. A combination of facilities and non-facilities based competition will provide Canadian wireless consumers with the great variety of choice that wireline consumers now enjoy.

"Worldwide, wireless service continued to grow very rapidly. Indeed, the number of mobile phones overtook the number of fixed lines in 2002.⁴² By the end of 2002, the world had almost completed the transition to digital cellular. Analog cellular accounted for as little as 3% of the total number of subscribers. It is expected that most analog cellular service in North America will be phased out by 2008."

Canadian experience in wireline competition has clearly demonstrated that opening up markets to non-facilities based competition does not discourage the construction of infrastructure, it only discourages the construction of uneconomic infrastructure. Making full (extended) resale and roaming along with the same degree of interconnectivity now available in wireline networks a condition of AWS/PCS/Cellular licensing may encourage bidders to concentrate on obtaining greater amounts of spectrum in smaller geographic areas along with providing a more intensive level of network over smaller areas.

As mobile technology is now starting to converge back to a common standard, UMTS (similar to the 1980s when mobile service was provided by all carriers with AMPS), fully open resale and roaming will also encourage new, locally based, groups to bid on spectrum to provide services in currently unserved and underserved areas.

Harmony Mobile also notes an extremely high disparity in the rates that the incumbents charge for packet data services. The variation of over 100:1 is the highest disparity in rates ever observed in a Canadian telecommunications product. Furthermore, it appears that such pricing often favours content provided by an affiliate.

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