

PUBLIC MOBILE INC.

Reply Comments of Public Mobile Inc.

*Canada Gazette, Part I, SMSE-018-10, 30 November 2010 -
Consultation on a Policy and Technical Framework for the 700
MHz Band and Aspects Related to Commercial Mobile Spectrum*

6 April 2011

Introduction

In these reply comments Public Mobile focuses on four key areas:

1. The objective of the 700 MHz auction is to foster sustainable competition.

The consultation document states its aim is to “encourage a competitive telecommunications marketplace.” For the benefits of competition to be enjoyed by Canadians over the long term, competition must be *sustainable*. The only way to encourage sustainable competition is to ensure that operationally-efficient and valuable, sub-1GHz spectrum is obtained and commercialized by carriers that compete with Rogers, Bell and TELUS (the “Incumbents”). If new entrants are not allowed fair and reasonable access to 700 MHz spectrum, the competition that has unfolded since the AWS auction will be short-lived. In addition it could permanently limit competition in small towns and rural markets by allowing existing players to monopolize the sub-1 GHz spectrum critical for efficient deployment. An open auction would result in the Incumbents purchasing all spectrum available to them, as was the case with the non-set-aside spectrum in the 2008 AWS auction. After a detailed analysis, Ofcom (the UK telecommunications regulator) concluded a long-term sustainable infrastructure-based provider required a minimum of 40-60 MHz of spectrum (depending on how much is sub-1 GHz) and that 105 MHz was a sufficient cap for any provider. Without a complete set-aside of the 700 MHz spectrum, Industry Canada would both facilitate the Incumbents obtaining an excess of spectrum and prevent new entrants from reaching this sustainable level.

2. The positive contributions to competition in the Canadian wireless market made by Public Mobile and other new entrants.

Public Mobile and the other new entrants have directly increased competition to the benefit of Canadian consumers, businesses and the economy as a whole. This impact has been multiplied by the responses of the Incumbents as they have opted to lower prices in reaction to new market entry – actions they would not have taken without being pushed to compete by new entrants.

3. The real spectrum requirements of Incumbents and new entrants, especially for the launch of LTE.

The Incumbents argue that they are undersupplied with spectrum and that their alleged spectrum shortage will worsen in the future. This is simply not the case. The Incumbents have significantly more spectrum compared to dominant incumbents in other countries, and compared to all new entrants in Canada. Further they have not deployed or commercialized the AWS spectrum procured in 2008. Even if the Incumbents were to require additional spectrum at some point in the future, after they have utilized their existing unused spectrum, the new entrants all have a much greater immediate need.

4. Set-aside and strict auction caps are the mechanisms that will best ensure a competitive Canadian wireless services market on a sustainable and long-run basis.

A complete set-aside of the 700 MHz spectrum for new entrants is the appropriate mechanism for the Department to adopt. The substantial 800 MHz spectrum holdings that the Incumbents currently have suggests that allowing new entrants competitors to access and share the 700 MHz spectrum resource is the best public policy mechanism to adopt. In-auction caps should be

implemented based on all holdings of sub-1 GHz spectrum in order to prevent the domination by any one new entrant in any of the regions. Further, in light of other parties' submissions in this consultation, Public Mobile would like to revise our submission to support a preference for band plan Option 1 (follow the U.S. band plan) to a preference for band plan Option 1 with the added recommendation of splitting the Upper C into a 2 x 5MHz block and a 2 x 6MHz block.

Reply Comments of Public Mobile

Public Mobile's failure to respond to any particular submission of any party that is or could be adverse to Public Mobile's submissions viewed as a whole should not be taken by the Department as support of, or acquiescence to, such submissions.

1. The key objective of the 700 MHz auction should be to foster sustainable competition

Industry Canada's stated objective for the 700 MHz consultation is laid out clearly in the consultation document:

"Industry Canada is committed to ensuring that Canadian consumers, businesses and public institutions continue to benefit from the availability of new, advanced and affordable telecommunications services in all regions of the country In pursuing these objectives, the Department has acted to **encourage a competitive telecommunications marketplace**, as it believes that competition stimulates innovation and investment by the industry, **which can lead to lower prices, better services and more choice** for consumers, businesses and public sector users."¹ (emphasis added)

Public Mobile submits that the best public policy for all Canadians is to establish an auction design that encourages sustainable competition by ensuring that all, or the vast majority of, the 700 MHz spectrum is obtained and commercialized by new entrants.

Based on our review of the Incumbents' submissions, it is apparent that they are trying to mischaracterize the true objectives of the 700 MHz spectrum auction. Bell is particularly blatant in its attempt to establish a new objective for the Department when it states at para 82 of its submission that:

"Therefore, the Department's objective must be an efficient and competitive wireless market, and not artificially maintaining a large number of new entrants, many of which have already expressly stated they intended to consolidate. Propping up new entrants, and continually providing them with new entrant concessions (particularly when the new entrants are large and well capitalized), will increase costs and reduce the overall efficiency of the market to the detriment of Canadians."²

The Department's policies are not "propping up new entrants", and the Departments COLs have specific limitations on sale to incumbent carriers but not to non-incumbent carriers. The Department's policies have been, and it is hoped that they will continue to be, designed to foster an environment that brings the benefits of sustainable competition (through sustainably lower prices and innovative services) to Canadians.

¹ Industry Canada consultation document, "Notice No. SMSE-018-10 – Consultation on a Policy and Technical Framework for the 700 MHz Band and Aspects Related to Commercial Mobile Spectrum."

² Bell 700 MHz consultation comments, para 82.

It should be noted that the Incumbents are very well capitalized, and they do not need to be “propped up”. Below are facts taken from the annual reports of Rogers, Bell and TELUS, as well as other public sources:³

- **\$2.6 billion** – the total amount of dividends paid by Rogers, Bell and TELUS to their shareholders in 2010
- **\$1.8 billion** - the total value of share buy-backs completed by Rogers and Bell combined in 2010
- **\$2.6 billion** - the total amount spent by Rogers, Bell and TELUS in the AWS auction in 2008 for spectrum not yet deployed or commercialized.

Further, since the start of 2010, the Incumbents have raised almost \$10 billion in debt financing. The Incumbents have enormous capacity to fund asset purchases from highly profitable businesses or from external sources, including the multi-billion dollar purchases of AWS spectrum that has been warehoused and not used, simply to keep it out of the hands of new entrant challengers.

In contrast, new wireless ventures, like Public Mobile, are pouring risk capital into expanding networks, building brands, and serving customers. An “open auction” at this stage of competitive evolution will in fact preclude fair and reasonable access to spectrum by new entrant companies that in their brief existence have brought demonstrable benefits to Canadians.

Finally, it is noteworthy that numerous proceedings have been initiated which are aligned with the Government’s policy of fostering sustainable competition in the Canadian wireless market.⁴ Government and regulatory policy and decisions are consistent with the current evolving environment of fostering sustainable competition. New entrants should be permitted to have fair and reasonable access to 700 MHz spectrum so they can compete in the medium and long term with the Incumbents by offering advanced wireless services like LTE.

The Department should ensure new entrants have fair and reasonable access to 700 MHz spectrum in order to achieve the desired objectives of the 700 MHz auction consultation process; lower prices, better services and more choice for Canadians

³ All numbers used in these calculations can be found in the Incumbents 2010 annual reports; available at Rogers: http://www.rogers.com/web/Rogers.portal? nfpb=true& windowLabel=investor_1_1&investor_1_1_ actio nOverride=%2Fportlets%2Fconsumer%2Finvestor%2FshowLandingPageAction&_pageLabel=IR_LANDING
Bell: <http://www.bce.ca/en/investors/index.php>
TELUS: <http://about.telus.com/investors/en/>

⁴ At the Competition Bureau Rogers is being prosecuted for deceptive advertising tactics to steer consumers away from the new entrants; “Competition Bureau Takes Action Against Rogers Over Misleading Advertising” <http://www.competitionbureau.gc.ca/eic/site/cb-bc.nsf/eng/03316.html>, Nov. 19, 2010.

The CRTC is advocating policies that make it easier for consumers to switch wireless carriers; Broadcasting and Telecom Regulatory Policy CRTC 2011-191 “The customer transfer process and related competitive issues” <http://www.crtc.gc.ca/eng/archive/2011/2011-191.htm>, March 18, 2011.

Industry Canada is in the process of revising its roaming and tower sharing policies; Industry Canada consultation document “Gazette Notice No. DGRB-005-08 – Release of Industry Canada's Arbitration Rules and Procedures for Mandatory Roaming and Antenna Tower and Site Sharing.”

2. The positive contributions to competition in the Canadian wireless market made by Public Mobile and other new entrants.

Submissions in this consultation from new entrants and Incumbents alike generally acknowledge the competitive intensity in the Canadian wireless market today; however, the submissions disagree on the root cause of competitive benefits. The Incumbents argue that their continued investment in infrastructure is driving competition, while new entrants believe the benefits of competition actually come from competition itself, and from the fact that new service providers have entered the marketplace and are currently offering more competitive prices and service offerings.

Public Mobile takes the position that new entrants are responsible for directly bringing the benefits of competition to Canadians through the introduction of lower prices and innovative services. This is not credibly open to debate. It is clear from the new entrants' submissions that the positive impacts in the marketplace result from competitive entry. Further, it is simply not credible for the Incumbents to take credit for the benefits that have accrued in the marketplace (such as millions of Canadians now benefitting both from lower costs and bill predictability, resulting directly from new entrant market activity).

TELUS describes the general decrease in pricing since the AWS auction in paragraph 116 of its submission: "Voice ARPU has continued to decrease, showing a decline from \$52.94 in 2007 to \$42.98 in 2010."⁵ TELUS continues in paragraph 117 of its submission where it states: "The introduction of new entrants as a result of the AWS wireless auction has continued to have the overall effect of increasing competition."⁶ TELUS also states in paragraph 125 that "Recent pricing plans in the market suggest that Canada's pricing and average wireless revenue per minute are now even lower and more competitive, in part driven by the aggressive pricing of new entrants to gain market share."⁷

The Department should also note that the state of competition (prices, innovative service offerings, etc.) in markets where new entrants have *not* yet deployed services is markedly different than in areas where only the Incumbents currently operate. The cost effective, unlimited service plans offered by Incumbents in markets where new entrants have launched services are simply not available to Canadians where new entrants have not yet launched. Without the real and palpable stimulus of new entrants, the Incumbents will likely be content to maintain their historically high margins and prices.

New entrants offer the same plan choices to all customers regardless of where they live – whether in urban or rural markets. Incumbents, by contrast, have the ability to offer the same innovative services and unlimited, low cost pricing plans to the entirety of the "97% of Canadians" they are able to serve, yet they consciously choose not to. The Incumbents' current business practices respecting the treatment of some urban Canadians, on the one hand, and rural Canadians, on the other, reinforces the need for the Department to ensure that new entrants have fair and reasonable access to 700 MHz spectrum to effectively compete with the Incumbents in all markets in Canada to the continued benefit of all Canadians.

Real competition in the Canadian wireless services market is a direct result of Industry Canada's decisions to encourage competition during and after the 2008 AWS auction and the resulting market entry of new entrant competitors.

⁵ TELUS 700 MHz consultation comments, para 116.

⁶ TELUS 700 MHz consultation comments, para 117.

⁷ TELUS 700 MHz consultation comments, para 125.

3. The real spectrum requirements of incumbents and new entrants, especially for the launch of LTE.

Public Mobile has acute spectrum requirements. We do not have excess spectrum. We do not have the luxury to choose which spectrum shall be used to launch new services. Public Mobile, like most new entrant carriers, is spectrum constrained.

The Incumbents introduced various studies to try to justify or rationalize the fact that they have not deployed any AWS spectrum purchased in the 2008 auction. They have not deployed AWS spectrum for two key reasons. First, they have more than enough spectrum and did not need to spend the capital to deploy additional networks. Second, it was obviously decided by the Incumbents that regardless of operational needs, it was an economically rational decision at virtually any price to keep AWS spectrum out of the hands of new entrant competitors.

Whether one uses the term “warehousing”, or “inventorying”, the result is the same. However, at para 109 of Bell’s submission, Bell argues that the hoarding of spectrum in Canada “is simply not an issue.”⁸

Public Mobile submits that Bell’s position is not credible. It is also submitted that it would not be progressive or purposeful, forward-looking public policy to design a spectrum allocation process that enables dominant incumbent carriers to increase their already vast holdings of valuable sub-1 GHz spectrum while new entrants are starved for new spectrum that would otherwise allow them to provide more and better services to urban, suburban and rural Canadians.

As demonstrated by a study by the SeaBoard Group, the Incumbents own an inordinately large amount of spectrum relative to other Canadian carriers.^{9 10}

Not only do the Incumbents hold a significant amount of spectrum compared to Canadian new entrants, but they hold excessive amounts of spectrum compared to large incumbent U.S. and international carriers. The SeaBoard report demonstrates this through its analysis of subscribers per MHz for Canadian and US carriers as well as total spectrum holdings for top carriers in various countries.¹¹

The SeaBoard report clearly demonstrates the spectrum dominance of Canadian Incumbents, not just in relation to new entrant challengers in Canada, but also relative to their global peers.

In the submissions made to the Department in this consultation, Incumbents and new entrant carriers alike have argued that the acquisition of 700 MHz spectrum is required for the deployment of LTE services. However, unlike the Incumbents, new entrants actually need 700 MHz to deploy LTE. Incumbent spectrum holdings, as shown above, are more than sufficient to deploy a robust LTE offering with a viable handset ecosystem.

⁸ Bell 700 MHz consultation comments, para 100.

⁹ “Over the Rainbow: Thoughts on the Canadian 700 MHz Discussion” SeaBoard Group, March 2011, p.9.

¹⁰ It should also be noted that the “Other” category in the graph in the report is spectrum that is divided between many carriers, including all new entrants; Public Mobile, Wind Mobile, Mobilicity, Shaw, Videotron, EastLink and others.

¹¹ “Over the Rainbow: Thoughts on the Canadian 700 MHz Discussion” SeaBoard Group, March 2011, p.1 & 11.

At paragraph E12 of its submission, Bell writes:

700 MHz is powering 4G/LTE networks in the U.S., which means that the latest mobile devices are being built to accommodate 700 MHz spectrum. Canada's wireless carriers therefore all require a fair opportunity to bid for 700 MHz spectrum, in an open auction, in order to even have a chance to acquire and take advantage of economies of scale in obtaining the latest mobile devices for use on LTE networks at home and abroad and to thereby enable the continued progression of our national business model.¹²

Bell continues in paragraph E13, stating that:

Without a fair opportunity to access 700 MHz spectrum, or with the imposition of spectrum caps or set-asides, one of Canada's national carriers will be permanently disadvantaged, resulting in its customers not being able to roam in the U.S., being able to use leading edge mobile devices at affordable cost or to benefit from the productivity and benefits afforded by 4G/LTE.¹³

Bell's statements are an oversimplification and are designed to attempt to create a sense of Incumbent urgency to acquire 700 MHz spectrum.

While it is true that handsets are being developed to accommodate 700 MHz spectrum (based on the requirements of Verizon and AT&T), no handsets are exclusive to a single band class. If they were, they would not be able to roam on networks around the world that make use of different frequencies. Nor would they enable backward compatibility on Verizon and AT&T's own networks – the handsets need to support multiple band classes so that Verizon and AT&T customers can use their LTE-capable handsets on parts of the network that have not yet been upgraded. As a result, this developing handset ecosystem will by design support band classes beyond the 700 MHz. In other words, Bell's submission that they will not have the opportunity to obtain "the latest mobile devices for use on LTE networks" or that Bell risks its "customers not being able to roam in the U.S." is both misleading and inaccurate.

More important, Bell's statement is already patently false. The first carrier to deploy LTE handsets was Metro PCS in the United States which is offering LTE services using PCS and AWS spectrum. If they wanted to, the Incumbents could deliver LTE services on their existing unused spectrum today.

The Incumbents have the luxury of transitioning customers onto LTE networks using AWS spectrum that they are currently holding in "inventory." All the Incumbents' spectrum needs, especially for the deployment of LTE, can be met by deploying the spectrum they purchased in the 2008 AWS auction and then subsequently "warehoused."

Public Mobile needs fair and reasonable access to 700 MHz spectrum to compete over the medium and long term. Incumbents have a vast and unparalleled amount of spectrum, much of which they have chosen to hoard. The Incumbents can make use of "warehoused" AWS spectrum to deploy LTE without acquiring additional spectrum resources.

¹² Bell 700 MHz consultation comments, para E12.

¹³ Bell 700 MHz consultation comments, para E13.

4. Set-aside and in auction caps are the best mechanisms to ensure a competitive Canadian wireless services market.

In our initial submission to Industry Canada, we advocated the need for a three-pronged approach to foster sustainable competition through the design of the 700 MHz auction:

1. Complete set-aside of 700 MHz spectrum for carriers who do not currently hold 800 MHz (sub-1 GHz) spectrum in the same region.
2. Carriers with more than 20 MHz of unused spectrum should not be allowed to bid on any additional spectrum in the auction.
3. In-auction regional caps that ensured no bidder in the auction can acquire more than 25 MHz of the 700 MHz spectrum in any given licence region.

Public Mobile submits that these mechanisms would be the most effective methods of ensuring that competitors have fair and reasonable access to 700 MHz spectrum which will ultimately result in sustainable competition.

A complete set-aside will ensure that competitive carriers hold and commercialize valuable sub-1 GHz spectrum as opposed to the spectrum being purchased and hoarded by incumbent carriers already holding vast and unparalleled quantities of 800 MHz spectrum. A policy that ensures that sub-1 GHz spectrum is commercialized by new entrants that operate in competition with the Incumbents is the best policy to reach the critically important objective of sustainable competition.

Furthermore, we submit that any carrier holding 20 MHz or more of any unused PCS, Cellular or AWS spectrum should be precluded from participating in the 700 MHz auction. Carriers with 20 MHz or more of unused spectrum can deploy a robust LTE offering without acquiring 700 MHz spectrum. Allowing carriers with 20 MHz or more of unused spectrum to bid on and acquire 700 MHz will only perpetuate the hoarding of spectrum to the detriment of Industry Canada's policy objective to encourage sustainable competition.

In addition to set-aside spectrum based on 800 MHz holdings, Public Mobile submits that no bidder should be allowed to acquire more than 25 MHz of 700 MHz spectrum in any given licence region. This added measure would ensure that every market in Canada will have at least four holders of valuable sub-1 GHz spectrum. The above auction framework will ensure that valuable sub-1 GHz spectrum will be held by multiple carriers in each region. This is an important and critical step to encouraging sustainable competition.

This approach is consistent with the recent consultation document from Ofcom¹⁴, the UK telecommunications regulator, which concluded that it was important to maintain a minimum of four "wholesale networks"¹⁵ to ensure there was sustainable competition.

¹⁴ Ofcom "Consultation on assessment of future mobile competition and proposals for the award of 800 MHz and 2.6 GHz spectrum and related issues" March 22, 2011.
<http://stakeholders.ofcom.org.uk/binaries/consultations/combined-award/summary/combined-award.pdf>

¹⁵ Note that Ofcom discusses "wholesale networks" to distinguish between competing infrastructures rather than competing retail brands. Specifically, they conclude that ensuring an industry structure with at least four competing network infrastructures is sufficient to maintain sufficient retail competition without the need to specifically mandate wholesale access for retail MVNOs.

As part of this analysis, Ofcom also reviewed in detail the spectrum requirements to support a long-term sustainable competitor in the wireless market. Ofcom concluded that infrastructure-based providers need at least 40 MHz (assuming 20 MHz of sub-1 GHz spectrum) and up to 60 MHz (without sub-1 GHz spectrum) to be sustainable long-term competitors. Given the excess spectrum currently held by Canada's Incumbents, even a complete set-aside of the 700 MHz spectrum is not sufficient to reach these minimum levels for four sustainable infrastructure-based competitors. However, when combined with a set-aside of the 2500 MHz spectrum, the minimum comes closer to being achievable (while still leaving the Incumbent networks with more spectrum than Ofcom has proposed as a maximum cap – 105 MHz, with no more than 27.5 MHz of sub-1 GHz spectrum.)

How could a partial set-aside be implemented?

Some parties to this consultation have recommended a partial set-aside, with some of the 700 MHz spectrum reserved for new entrants with the Incumbents having access to the remainder. (Telus has gone so far as to propose a "new entrant" auction and a separate set-aside for an "Incumbent" auction.) As discussed above, such a solution would only serve to further the inherent competitive advantage that the Incumbents enjoy from having been granted spectrum licences in the past (without any auction in many cases, and without any competition in some cases).

In addition, it creates significant complications given the nature of the 700 MHz spectrum and the proposed band plan. The limited available spectrum (five paired licences, assuming the Lower A, B and C, and the Upper C is split into two) makes it difficult to divide between the Incumbents and new entrants. In addition, the licences are not homogenous. Unlike previous licencing bands where there was a single contiguous block, each of the 700 MHz licences has unique characteristics. To select specific licences for Incumbents and for new entrants is, effectively, to force technology choices on each group (given the evolutionary state of the technology ecosystem in the United States).

Telus has made a useful suggestion related to this issue¹⁶. If Industry Canada is not prepared to auction all of the paired spectrum for new entrants at this time, it should split the 700 MHz into two auctions. First, hold an auction that is purely set aside for new entrants. This would logically include the Lower B and C blocks and the Upper C block. These licences are sufficient to provide an initial path to LTE for the new entrants and (with an in-auction cap) ensure there are a minimum of two competitive network providers with spectrum, bringing competition to both urban and rural Canadians. The remainder of the spectrum (Lower A, D, E and, possibly, Upper D) would be auctioned at a later date. This would both allow more time for the technology for these licences to evolve and give Industry Canada time to review the evolving state of competition in the Canadian market. At that time, the decision can be made whether it is appropriate to set aside these licences to promote more competition or hold an open auction (which would necessarily favour the Incumbents).

Public Mobile is of the strong belief that full set-aside and in-auction caps are the best way to ensure sustainable competition in Canada. Make no mistake, the Incumbents will purchase all spectrum they are permitted to access through an open auction process; it is an economically rational decision for dominant Incumbent carriers to pay more for spectrum resources to keep competitors out of the market than what competitors would be prepared to pay to enter the market.

¹⁶ TELUS 700 MHz consultation comments, para 158-60.

Conclusion

Public Mobile respectfully submits that the Department should design the 700 MHz spectrum auction process with the overarching objective of promoting sustainable competition. This is clearly the optimal way to ensure that Canadians, and the Canadian economy as a whole, reap the benefits of wireless competition over the long run – whether in urban, suburban or rural markets.

In turn, the optimal way to ensure that sustainable competition unfolds is to mandate that 700 MHz spectrum is purchased and commercialized by new entrant carriers who operate in competition with the Incumbents (who already hold or have access to substantial and sufficient sub-1 GHz spectrum holdings.) Further, the auction should be designed to ensure that each market has at least two new entrant purchasers with sufficient 700 MHz spectrum to viably compete with the Incumbents over the long run.

Many parties in this consultation process have noted that the 700 MHz auction is of significant importance to the wireless telecommunications industry in Canada and to the manner in which competition in this sector unfolds over the coming decades. Public Mobile agrees with this perspective, and we urge that the Department adopt sustainable competition as the hallmark of this auction. We submit that the 700 MHz auction should not be permitted to be remembered as a key plank in the perpetuation of the Incumbent carriers' dominance in the Canadian wireless market. **Competition, sustainable and fair, is the best approach for all Canadians.**