

Canada Gazette Notice No. SMSE-018-10

**Consultation on a Policy and Technical Framework
for the 700 MHz Band and Aspects Related to
Commercial Mobile Spectrum**

Published in the *Canada Gazette*, Part 1

Dated 4 December 2010

Reply Comments

of

Bell Mobility Inc.

6 April 2011

Table of Contents

	<u>Page</u>
EXECUTIVE SUMMARY	1
1.0 INTRODUCTION.....	1
2.0 DRIVERS FOR SPECTRUM DEMAND.....	2
3.0 700 MHZ BAND PLAN ISSUES AND CONSIDERATIONS	9
4.0 GUARD BANDS.....	10
5.0 PUBLIC SAFETY SPECTRUM	12
6.0 TIER SIZES.....	13
7.0 TREATMENT OF EXISTING SPECTRUM USERS.....	14
8.0 CHANGES TO CANADIAN TABLE OF FREQUENCY ALLOCATIONS.....	15
9.0 SPECTRUM UTILIZATION POLICY	15
10.0 PROMOTING COMPETITION	16
10.1 State of Competition.....	16
10.2 Bell Mobility – TELUS Infrastructure Sharing	20
10.3 Competition in Rural Areas	22
10.4 Impacts of Government Measures Adopted in the AWS Auction	25
10.5 Problems Also Arise with Spectrum Caps.....	30
11.0 NATIONAL PROVIDER VS. NEW ENTRANT SPECTRUM HOLDINGS	32
12.0 PROMOTING SERVICE DEPLOYMENT IN RURAL AREAS.....	42
13.0 OPEN ACCESS	43
14.0 AUCTION TIMING	43

EXECUTIVE SUMMARY

E1. Canada is a world leader in wireless on all fronts. Bell Mobility is at the forefront of these Canadian wireless achievements offering its customers the widest array of leading edge wireless devices including smartphones, Turbo Hubs, Turbo Sticks and tablets. These devices are supported by leading edge wireless networks offering customers among the fastest wireless speeds available in the world.

E2. Bell Mobility's over 7 million customers are enthusiastically responsive to the new capabilities provided by its network. Explosive wireless data growth, enabled by Bell Mobility's billions of dollars of network investment, is a reality in Canada driven by a virtuous circle of affordability, variety of devices, richer content, faster speeds and DSL/Cable like service offerings.

E3. Bell Mobility is currently using or plans to use its entire existing spectrum and does so in a spectrally efficient manner. However, as clearly demonstrated in the record of this Consultation, we do not have sufficient spectrum to meet the expected continued exploding wireless data requirements of our customers. Nor do we have sufficient spectrum to deploy the promise of wireless broadband into rural and remote areas of Canada. Further, given the national focus of our network deployment and the extensive use of leading edge smartphones by our customers, Bell Mobility is quickly using up all of its available spectrum. The new entrants' business models, as demonstrated by the record of this Consultation, are focused on urban deployment and reliance on voice and text phones. This does not require as much spectrum.

E4. For this reason, Bell Mobility submits that parties who reference a report by the SeaBoard Group, addressing spectrum holdings of various national service providers and related issues, do so in error. As demonstrated in these Reply Comments the SeaBoard report is flawed and does not conduct a valid comparison regarding spectrum holdings, while its comments regarding spectrally efficient antennae are simply taken out of context and are wrong.

E5. New entrants also questioned national service providers' need for any additional mobile spectrum. Just as is the case in the United States, a key reason for the proposed AT&T acquisition of T-Mobile, announced subsequent to the filing of Comments in this Consultation, is that it quickly provides the spectrum and network efficiencies necessary for AT&T to address

impending spectrum exhaust in key markets driven by the exponential growth in mobile broadband traffic on its network. AT&T noted that its mobile data traffic grew 8,000 percent over the past four years and that by 2015 it is expected to be 8 to 10 times what it was in 2010. AT&T states that due to the use of smartphones, tablets and e-readers – essentially mobile broadband – it requires additional spectrum before new spectrum will become available through FCC licensing processes. Further, AT&T noted, the entire industry will need additional spectrum to address the explosive growth in demand for mobile broadband. Bell Mobility reiterates that the exact same need exists in Canada.

E6. The record of the Consultation shows that 700 MHz is the essential ingredient which, if properly employed, can enable Canada to fully exploit the opportunity and promise of the wireless broadband economy. The critical issue for Canada is to ensure that we seize this opportunity and not squander it. 700 MHz spectrum, which is in very limited supply, is ideally suited and is absolutely key to enabling national wireless carriers to build-out 4G/LTE in urban and rural areas, due to its propagation and other technical characteristics. Given Bell Mobility's national focus, our wireless data traffic is growing in rural and remote areas as fast as it is in urban centres. Carriers who operate on a regional or urban basis, as the record of the Consultation shows, simply do not have the same dire need for this spectrum as do the national carriers who have millions of urban subscribers, but also serve most every rural and remote corner of our country, where usage is surging.

E7. The record of the Consultation confirms that Canadian wireless national providers need a fair opportunity to bid on 700 MHz spectrum as part of the effort to ensure that they can offer their millions of subscribers the ability to roam onto U.S. LTE networks as they are deployed in the U.S. and Canada. 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., not being able to use leading edge mobile devices at affordable cost or to benefit from the productivity and other benefits afforded by 4G/LTE.

E8. Significantly, Bell Mobility notes that municipalities representing almost seventy communities strongly supported an open auction to ensure that their communities were included in the mobile broadband revolution. The consistent theme of these numerous submissions was to request that Industry Canada ensure that the auction does not leave their communities behind by favouring those entities who have a track record of concentrating on larger urban

centres. Like Bell Mobility, these municipalities believe that an open and transparent auction is the best way to ensure that their communities benefit from the productivity enhancing capabilities of mobile broadband.

E9. It remains Bell Mobility's firm belief that all Canadian wireless operators should be permitted to participate in an open 700 MHz auction, with a view to ensuring that the spectrum is deployed to its highest value use. It is certainly the case that national wireless carriers who operate in urban and rural areas, with a commitment to serving all Canadians, with a track record of investing in Canada, creating jobs in Canada and introducing technological innovations to all Canadians in all parts of Canada must be given a fair opportunity to access 700 MHz spectrum. That means there can be no set-asides imposed on the 700 MHz auction. Unlike the AWS spectrum, there simply is not enough available 700 MHz spectrum to make a set-aside workable.

E10. The comments of several parties confirm that the U.S. did not employ a set-aside in their 700 MHz auction and as a result we are seeing the deployment of LTE networks by the largest carriers in that country with plans for national coverage. This is largely being undertaken by Verizon and AT&T who, not hampered by set-asides or spectrum caps, acquired the 700 MHz licences they needed, paying more than \$16 billion of the total auction proceeds of \$19 billion. If we want to achieve the same national 4G/LTE network coverage for all Canadians, an open auction is required in Canada. Bell Mobility reiterates that with AT&T and Verizon's national deployment commencing in the U.S., Canada now seriously risks falling behind unless we ensure that national carriers in this country have fair access to 700 MHz spectrum.

E11. Noting that problems also arise with spectrum caps, Bell Mobility submitted that Industry Canada got it right in 2004 when it reasoned that the Canadian wireless market continues to be a mature market and the need for spectrum caps is even less relevant than in the early days of the industry. The record of the Consultation confirms that given the current evolution and competitiveness of the Canadian wireless market, spectrum caps should not be placed on the amount of spectrum that can be acquired by any single wireless service provider including its affiliates.

E12. Bell Mobility continues to strongly believe that if the Government establishes an auction framework that provides fair access to spectrum to any provider who seeks to bid, without any preferential rules that favour any new entrants or particular providers or that needlessly drive up

E13. The record of the Consultation also confirms that the new entrants are large, well capitalized entities and are more than financially capable of participating in the auction without Government assistance. Importantly, the record shows that new entrant Quebecor is not even seeking a set-aside but instead notes that it is prepared to compete with others for the spectrum. This should be ample proof for Industry Canada that none of the new entrants requires Government assistance to participate in the auction. As noted in our Comments, the enterprise value of the national carrier TELUS, at approximately \$21 billion, is lower than the combined enterprise value of Quebecor and Shaw at \$22.5 billion, whose combined networks will not cover nearly as much geography as the networks of TELUS. Bell Mobility continues to believe that the transfer of wealth, through set-asides and caps, from the shareholders of one large company to the shareholders of another large company does not improve economic efficiency, nor does it benefit Canadians.

E14. The Canadian wireless industry has, in the past, benefited from the relative freedom from regulation. Traditionally, this less-interventionist policy approach has allowed Canada's wireless companies to adapt and grow, be competitive and deliver innovative wireless services to Canadian consumers at affordable prices. Competition has resulted in billions of dollars being invested by Canada's wireless network providers. This investment has resulted in Canada being a world leader in the provision of wireless services. The combination of network quality and affordable prices has resulted in Canadians having among the highest average voice minutes per month.

E15. The record also shows that the heightened state of national competitiveness in Canada's wireless market is mostly attributable to competition between Canada's national wireless carriers resulting from the elimination of Rogers' stranglehold on the GSM technology in Canada. This development had less to do with the AWS auction outcome but instead was primarily due to competitive market forces playing out between long time national wireless rivals.

E16. Despite the clear benefits of a less interventionist regulatory approach, over the last 2 to 3 years Industry Canada has alarmingly become more and more interventionist in its approach

to the wireless sector. Bell Mobility continues to consider that this is worrisome and inappropriate.

E17. When Industry Canada developed its AWS auction policy, its intention was to introduce further competition into the Canadian wireless market, and not to permanently disadvantage one of the national carriers. By any measure, the Canadian wireless industry is more competitive today than it was in 2006. The record also shows that in international comparisons, whether based on number of carriers competing or prices paid by customers, Canada compares favourably and in some cases more than favourably. Given the very limited amount of 700 MHz spectrum available, a set-aside in the 700 MHz auction will permanently disadvantage at least one of the three national carriers and its millions of Canadian customers. Again, this surely cannot be the cornerstone of Canadian spectrum policy.

E18. Some interveners have suggested that Bell Mobility and TELUS should be treated as associated entities in the upcoming auction. This would be highly inappropriate and damaging to the development of the Canadian wireless industry. As Rogers notes, the launching of competing HSPA + national networks by Bell Mobility and TELUS was the most significant competitive event to have occurred in the Canadian wireless industry exceeding even any competitive impact resulting from Industry Canada's AWS auction framework. Enabled by the Bell Mobility and TELUS infrastructure sharing arrangement, not only did it provide millions of Canadians with viable competitive choices, using the latest wireless devices, it also included network efficiencies which enabled, when launched in late 2009, the expansion virtually overnight of HSPA + wireless broadband technology throughout Canada including to rural and remote areas that otherwise would have been left out of the wireless broadband revolution. This is particularly significant given the demand for wireless broadband, as the record demonstrates, from those rural areas. Surely, it is not the intent of Government policy to discourage such innovative arrangements that have brought increased competition to Canadians and increased efficiencies to the wireless market.

E19. Further, these types of innovative network coverage arrangements are occurring throughout the industry, e.g. the Rogers – MTS Allstream arrangement, the Rogers - Tbaytel arrangement and the 2001 Bell Mobility – TELUS CDMA arrangement. These arrangements provide benefits to Canadians and, through the strategic extension of advanced networks into rural and remote areas, to Canada overall. Industry Canada, in recognition of the benefits of such joint network builds, has endorsed such arrangements and has not found, in previous

auctions, that they attract associated entity status. To its credit Industry Canada has not blocked or interfered with such innovative commercial arrangements. Reversing this position today, by suggesting that Bell Mobility unwind an arrangement which has generated significant benefits for Canadians and particularly those living in rural areas, would fly in the face of the Government's broader productivity agenda.

E20. To be clear, however, even with a joint build arrangement each party still requires its own spectrum to serve its many millions of wireless subscribers. Bell Mobility and TELUS each have approximately seven million customers. Each therefore requires sufficient spectrum capacity to serve a combined total of approximately fourteen million customers. To suggest that Bell Mobility and TELUS serve their fourteen million customers with spectrum capacity only sufficient for half that number would have dramatic negative implications regarding future network performance and competitiveness, for both carriers and their customers.

E21. It should also be noted that there is nothing prohibiting or preventing other wireless carriers, i.e. national providers, new entrants or regional incumbents, from participating in such commercial arrangements. Indeed, as discussed below, even the Department's November 2007 *Policy Framework for the Auction for Spectrum Licences for Advanced Wireless Services and other Spectrum in the 2 GHz Range*, recognized the validity of such inter-carrier arrangements in addressing who would qualify for mandated national roaming.

E22. Regarding spectrum acquisitions in general it is also important to note that there have been numerous occasions, including several outside of Industry Canada's licensing processes, to purchase mobile spectrum in Canada. When new PCS provider Microcell launched an initial public offering (IPO) in 1997, Shaw and Vidéotron were both listed as owning about 10% of Microcell. What is striking is that before and after the IPO, they could have grown their stake, but chose not to. In fact, not long after the IPO, Shaw sold its shares in 1998 for an after-tax profit of around \$11 million. Media reports said that the wireless investment was sold because it was not "core" to their future business. A similar story holds true for Vidéotron. In 2001, they declared their wireless investment "noncore" and attempted to sell their stake for a reported \$1 billion. Interestingly, they found that no one would buy at that price and eventually they declared a \$99 million write-down on the investment in 2002.

E23. For the existing carriers, however, history is quite different. TELUS bought Clearnet for \$6.6 billion in October of 2000 in what, at the time, was a "bet the company" transaction. In

2001, Bell Mobility was participating in Industry Canada's PCS Auction and demonstrated its willingness to take a substantial risk by bidding \$720 million. The spectrum acquired enabled Bell Mobility to enter Western Canada as a facilities-based competitor and within a year to build a 3G network without mandated tower sharing or any other form of Government subsidy or regulatory assistance. Similarly, Rogers and TELUS both sought to acquire Microcell in 2004. Rogers won, buying the company for \$1.4 billion. To be clear, Bell Mobility is not criticizing the strategic choices made by others, but it is important to note that there have been repeated opportunities to enter the wireless market in the past. Bell Mobility does not believe that it is appropriate to punish companies, such as Bell Mobility, who incurred the risk and entered the wireless business in the early years and sustained years of losses.

E24. After reading the various submissions, Bell Mobility has modified its views on certain issues, and now supports the view of parties who propose holding a joint-auction for the 700 MHz and 2500 MHz spectrum. Further, given the demands of users for mobile broadband, Bell Mobility believes that Industry Canada should conduct the joint auction in late 2012 thus making spectrum available for deployment beginning in 2013.

Summary of Bell Mobility's Position:

E25. Bell Mobility reiterates the positions taken in its Comments filed in response to the Consultation. Subsequent to our review of the record we have modified certain of our positions as indicated in the summary below.

E26. Bell Mobility notes that the majority of parties recommended harmonization with the U.S. band plan option 1 as discussed in the Consultation. Bell Mobility, after reading and reflecting on all the submissions, agrees with those parties who recommended a minor deviation from the U.S. band plan, i.e. splitting the Upper "C" block, which would facilitate more operators acquiring spectrum in the upcoming auction, without compromising the harmonization of the band.

E27. Bell Mobility retains the strong view that there should be no spectrum set-asides, caps or other new entrant concessions as part of the auction. The record of the Consultation shows that the Canadian wireless market is a functioning, highly competitive one, and there is nothing that warrants Government intervention to assist any party.

E28. Given the limited amount of 700 MHz spectrum available, an open auction, in which the maximum number of bidders are capable of participating, will also maximize the revenue return to Government. Recollecting that the 2008 AWS auction generated over \$4 billion for the treasury, this is not an inconsequential consideration as the Government considers the means available to address a record deficit. Bell Mobility therefore also recommends, in light of this substantial contribution to the treasury, that the Government increase the capital cost allowance (CCA) to 50% for the classes of assets most closely associated with broadband networks as an incentive to speed up mobile broadband infrastructure investments in Canada. Further, for capital investments in those areas identified by Industry Canada as "unserved" or "underserved" in RP-019, a CCA rate of 100% should be introduced to aid investment in rural areas. Clearly, such a move would also be supportive of the Government's digital economy strategy.

E29. The band plan should be harmonized with the U.S. 700 MHz band plan. This will, among other things, ensure that Canada can take advantage of the U.S. 700 MHz equipment ecosystem as well as facilitate roaming between Canada and the U.S. Band plan harmonization will also assist with cross-border coordination and facilitate interference avoidance. Our review of the record, however, leads us to agree with those parties who suggested splitting the Upper C band in order to make spectrum available to the maximum number of parties.

E30. The record clearly shows that the vast majority of parties were of the view that developments in the marketplace have outpaced the need for regulatory intervention to ensure open access requirements. Rather, open access is being made available, both in Canada as well as in the U.S., through the mechanisms inherent in fully functioning competitive market forces.

E31. Regarding auction timing, based on our review of the record, Bell Mobility now supports the use of a joint auction in order to licence the 700 MHz and the 2500 MHz spectrum bands. Given the demands of users for mobile broadband, Bell Mobility believes that Industry Canada should conduct the joint auction in late 2012 thus making spectrum available for deployment beginning in 2013.

E32. Regarding public safety use of the 700 MHz band, Bell Mobility notes that the overwhelming majority of parties addressing this issue agreed that, since the U.S. is currently considering its treatment of the "D" block, Industry Canada should defer its consideration of the

"D" block in Canada until such time as we are aware of the licensing approach chosen in the U.S. Industry Canada can then hold a separate consultation in Canada to consider the appropriate Canadian policy.

E33. Bell Mobility continues to support the use of a minimum Tier 2 service area for this spectrum. Based on our review of the record, however, Bell Mobility agrees with those parties who suggest that roll-out requirements are the best way to ensure that mobile broadband is deployed to rural and remote areas as well the urban centres of Canada. In particular we support the proposal suggesting that the roll-out requirement be applied on a Tier 3 service area basis even if the actual authorization is issued as a Tier 2 licence.

E34. Innovative infrastructure sharing arrangements are occurring throughout the industry and provides benefits to Canadians and, through the strategic extension of advanced networks into rural and remote areas, to Canada overall. Industry Canada, in recognition of the benefits of such joint network builds, has endorsed such arrangements and has not found, in previous auctions, that they attract associated entity status. It would be highly inappropriate and damaging to the development of the Canadian wireless industry to do so now. In short, Bell Mobility and TELUS are not associated entities.

1.0 INTRODUCTION

1. Bell Mobility Inc. (Bell Mobility) is pleased to provide the following Reply Comments in response to Industry Canada's *Consultation on a Policy and Technical Framework for the 700 MHz Band and Aspects Related to Commercial Mobile Spectrum*, as published in the *Canada Gazette*, Part 1, dated 4 December 2011 (the Consultation). Bell Mobility has reviewed the submissions of other parties, filed in response to the Consultation, and finds considerable support for the positions outlined in its 28 February 2011 comments (the Comments).

2. In its Comments, Bell Mobility expressed the view that the Consultation comes at a pivotal juncture in the evolution of global telecommunications networks. A number of parties shared that view noting that the licensing of the 700 MHz band represented a unique opportunity for Canada in the digital age. Bell Mobility also noted that, despite the dual challenge of an enormous geography coupled with a small population base, Canada is a world leader in wireless on all fronts. Professor Leonard Waverman and Kalyan Dagupta observed, in their report filed as Appendix 1 to those Comments, that the deployment of new HSPA + networks has put Canada ahead of the United States and several European nations in the "mobile broadband race".

3. This is a considerable feat when one takes into account the relative market size of Canada compared to that of the United States and Canada's low population density compared to all of these European nations. The challenge for Canada now will be to maintain that lead. Bell Mobility is prepared to do its part, in committing the substantial investment and technological expertise required to achieve that goal. The decisions made by Industry Canada in this proceeding, however, will be the lynchpin upon which Canada's continued lead in that race depends.

4. Bell Mobility continues to maintain the positions adopted in its 28 February 2011 Comments with specific modifications, based on its review of the record, as identified in these Reply Comments. In particular it remains our firm belief that all Canadian wireless operators should be permitted to participate in an open auction, with a view to ensuring that the spectrum is deployed to its highest value use. As stated in those Comments, national wireless carriers who operate in urban and rural areas must at least have an opportunity to fairly access such spectrum. Bell Mobility noted that those entities with a commitment to serving all Canadians, with a track record of investing in Canada, creating jobs in Canada and introducing technological innovations to all Canadians in all parts of Canada, including rural Canada, must

be given a fair opportunity to access spectrum. Further, that means there can be no set-asides imposed on the auction. Unlike the AWS spectrum, as the record of this Consultation shows, there simply is not enough available 700 MHz spectrum to make a set-aside workable without wasting the opportunity presented by this band and seriously limiting or diminishing, in light of the exploding mobile data demand, wireless service provided to almost 25 million existing customers.

5. Bell Mobility's reply comments are organized based on the structure of the Department's Consultation paper and refer to the submissions of other parties as deemed necessary.

2.0 DRIVERS FOR SPECTRUM DEMAND

6. In discussing the drivers for spectrum demand, the Consultation sought parties' comments as to the general need for additional spectrum at this time as well as their views as to the anticipated need for spectrum in the future.

7. Bell Mobility's Comments, including those filed in confidence with the Department, conclusively demonstrate that wireless data usage on its network is experiencing unprecedented and explosive growth. Further, given Bell Mobility's national focus, our wireless data traffic is growing in rural and remote areas as fast as it is in urban centres. The growth is being fuelled by ever increasing mobile device capability supported by ever increasing network speed. This in turn is driving even further user demand and usage. It is clear therefore that there is a general demand for the licensing of more commercial mobile spectrum simply to keep up with this explosive growth. Bell Mobility also expressed the view that in the absence of sufficient spectrum, its over seven million customers will experience delays and frustration in using their mobile devices and Canada will have squandered the opportunity presented by mobile broadband.

8. Bell Mobility submits that there was considerable substantiation of that view expressed in the submissions of other parties.

9. Rogers, for example, notes that as recently as October 2010, the United States Federal Communications Commission (FCC) expressed its view as to the general need for additional commercial spectrum when it:

. . . released a technical analysis to validate the need for additional mobile broadband spectrum in the near-term, and to estimate the value created by making new spectrum available. The FCC's analysis found that consumer demand for mobile data is experiencing significant growth and that spectrum resources will be exhausted within the next five years.¹

10. The Radio Advisory Board of Canada (RABC), a body charged with providing Government with unbiased advice regarding the use of the spectrum resource, similarly observed that:

On April 21st, 2010 at the [RABC's] Spectrum 20/20 conference under the topic "Spectrum Demand – is there a looming crisis?" Mr. Peter Rysavy (President, Rysavy Research) clearly made the case that demand for mobile broadband spectrum will exceed the supply.²

11. Further noting that Rysavy Research had authored several detailed analytical reports regarding the view that demand for mobile broadband spectrum would exceed supply, the RABC's submission states that:

The RABC believes that a review of these analytical reports clearly supports the need for additional mobile broadband spectrum, and justifies Industry Canada's allocation of 700 MHz and 2.5 GHz bands for mobile services.³

12. Like Bell Mobility, other parties stated that the growth in wireless data traffic is not limited to urban areas but is also being observed in rural traffic patterns. SaskTel states, for example, that:

SaskTel believes that additional commercial mobile spectrum is indeed required at this time, due to the explosive growth in data usage per wireless device especially in rural areas where access to high speed applications has been traditionally absent.⁴

13. Similarly MTS Allstream noted that:

¹ Rogers Communications Partnership (Rogers), Comments in Response to *Consultation on a Policy and Technical Framework for the 700 MHz Band and Aspects Related to Commercial Mobile Spectrum (SMSE-018-10)*, 28 February 2011, page 12.

² Radio Advisory Board of Canada (RABC), Comments in Response to *Consultation on a Policy and Technical Framework for the 700 MHz Band and Aspects Related to Commercial Mobile Spectrum (SMSE-018-10)*, 28 February 2011, page 5.

³ RABC, page 6.

⁴ Saskatchewan Telecommunications (SaskTel), Comments in Response to *Consultation on a Policy and Technical Framework for the 700 MHz Band and Aspects Related to Commercial Mobile Spectrum (SMSE-018-10)*, 28 February 2011, page 5.

. . . there is unfulfilled demand for mobile broadband applications and services in less densely populated rural and remote regions. A revealing fact is that MTS Allstream's customer base outside of Winnipeg has an average data usage per subscriber per month that is roughly double the comparable metric for users within Winnipeg. Failing to recognise [sic] and meet this demand could broaden the broadband gap between urban and rural Canadians.⁵

14. Bell Mobility does not agree with Globalive's comments, at pages 16 – 17 of its submission, where Globalive puts forth its interpretation of the spectrum requirements of Verizon and AT&T Wireless in the United States. Globalive states, in this regard, that:

These carriers have stated publicly that they do not consider that they require additional spectrum.⁶

15. Regarding Verizon, Globalive's statement does not properly characterize Verizon's corporate position which is more accurately depicted by a comment on the FCC's blog-site, by the FCC's Chief of Staff, noting that in fact:

. . . Verizon played a major role in building an overwhelming record in support of more mobile broadband spectrum, consistently expressing its official view that the country faces a looming spectrum crisis that could undermine the country's global competitiveness.⁷

16. The FCC Chief of Staff continued on to quote from a 30 September 2009 Verizon FCC filing, regarding the need for additional mobile spectrum, wherein Verizon stated:

Recognizing that 'the world is at the precipice of the full scale convergence of two powerful and sweeping forces: wireless mobility and broadband internet access,' numerous studies have analyzed the growing market for mobile broadband and concluded that significant additional spectrum must be allocated in order to keep up with demand and changing technologies. These studies make clear the urgency with which the Commission must act to identify and allocate additional spectrum for wireless services in order to maintain and promote innovation.⁸

17. Similarly, AT&T Wireless has been an outspoken and consistent advocate of the need for additional mobile spectrum both for its own network and the U.S. wireless industry in

⁵ MTS Allstream Inc. (MTS Allstream), Comments in Response to *Consultation on a Policy and Technical Framework for the 700 MHz Band and Aspects Related to Commercial Mobile Spectrum (SMSE-018-10)*, 28 February 2011, page 1.

⁶ Globalive Wireless Management Corp. (Globalive), Comments in Response to *Consultation on a Policy and Technical Framework for the 700 MHz Band and Aspects Related to Commercial Mobile Spectrum (SMSE-018-10)*, 28 February 2011, page 17.

⁷ FCC Blog site (FCC Blog) at: <http://blog.broadband.gov/?entryId=358488>.

⁸ FCC Blog at: <http://blog.broadband.gov/?entryId=358488>.

general. In this regard, AT&T's 20 March 2011 announcement of its intention to acquire T-Mobile USA, from Deutsche Telekom, noted that addressing AT&T's need for additional spectrum was one of the key reasons behind the acquisition. Specifically AT&T's press release stated that:

Addresses wireless spectrum challenges facing AT&T, T-Mobile USA, their customers, and U.S. policymakers

This transaction quickly provides the spectrum and network efficiencies necessary for AT&T to address impending spectrum exhaust in key markets driven by the exponential growth in mobile broadband traffic on its network. AT&T's mobile data traffic grew 8,000 percent over the past four years and by 2015 it is expected to be eight to 10 times what it was in 2010. Put another way, all of the mobile traffic volume AT&T carried during 2010 is estimated to be carried in just the first six to seven weeks of 2015. Because AT&T has led the U.S. in smartphones, tablets and e-readers – and as a result, mobile broadband – it requires additional spectrum before new spectrum will become available. In the long term, the entire industry will need additional spectrum to address the explosive growth in demand for mobile broadband.⁹ (Emphasis added)

18. Bell Mobility submits that it is quite clear that AT&T would not be spending \$39 billion to acquire T-Mobile if it did not require the additional mobile spectrum holdings resulting from the transaction.

19. Bell Mobility considers that the record is clear and unequivocal that there is a need for additional mobile broadband spectrum due to the explosive growth in mobile data usage by our customers and, most relevant to this Consultation, that this need is being observed in rural and remote as well as urban markets.

20. Bell Mobility's Comments also noted that 700 MHz spectrum, which is in very limited supply, is ideally suited and is absolutely key to enabling national wireless carriers to build-out 4G/LTE in urban and rural areas, due to its propagation and other technical characteristics. We also expressed the view that carriers who operate on a regional or urban basis do not have the same dire need for 700 MHz spectrum as do the national carriers who have millions of urban subscribers, but also serve most every rural and remote corner of our country. 2500 MHz spectrum, conversely, of which there is considerably more available than 700 MHz spectrum, is much more suitable to the needs of carriers who operate on a regional or urban basis. Bell Mobility notes that other parties also identified the critical linkage between the national

⁹ Available at: <http://www.mobilizeeverything.com/home.php>.

providers' access to 700 MHz spectrum and the build-out of wireless broadband to all regions of Canada, including rural and remote areas.

21. TELUS, for example, states that:

The best measure that the Department could adopt to ensure further deployment of advanced mobile services in rural and remote areas is to ensure that the wireless affiliates of the ILECs are fully eligible to bid for and obtain spectrum in these areas.¹⁰

22. As indicated in paragraph 152 of its Comments, Bell Mobility believes that it is extremely important that it have a fair opportunity to bid on 700 MHz spectrum, in sufficient quantities in both rural and urban areas, to ensure that LTE is made available to all Canadians. In this regard, Bell Mobility considers, given its over seven million customers and the explosive growth in mobile data usage by an ever increasing number of those users, that it will require a minimum of a 10X10 MHz block of 700 MHz spectrum to adequately meet those user needs. The propagation characteristics of 700 MHz make it ideal to deploy fixed and mobile wireless broadband to rural, as well as urban, areas. Further, Bell Mobility's plan to deploy LTE capability, throughout Canada including rural areas, is inextricably linked to having access to 700 MHz spectrum on a fair and commercially viable basis. Absent fair and commercially viable access by Bell Mobility to 700 MHz spectrum, Bell Mobility believes that we will see competition continue to focus primarily on urban areas to the detriment of rural Canada.

23. Speaking from the perspective of an incumbent carrier already licensed with 800 MHz spectrum and seeking to respond to the demand from rural customers for mobile broadband deployment, MTS Allstream notes that:

In order to effectively and affordably deploy broadband services using wireless spectrum to rural users, additional low frequency spectrum is required. The 25 MHz of low frequency spectrum currently available to MTS Allstream in the cellular band is simply insufficient to bridge the wireless broadband gap for rural regions, given existing deployments and the specific challenges associated with rural deployment. This prime consideration should be a driving factor in the Department's review of the technical and policy framework for the 700 MHz spectrum band.¹¹

¹⁰ TELUS Communications Company (TELUS), Comments in Response to *Consultation on a Policy and Technical Framework for the 700 MHz Band and Aspects Related to Commercial Mobile Spectrum (SMSE-018-10)*, 28 February 2011, page 58.

¹¹ MTS Allstream, page 2.

24. For its part Rogers states that:

. . . Rogers will require . . . 700 MHz spectrum to provide additional spectrum capacity in order to keep pace with the unprecedented demand for mobile broadband services that will continue over the next several years. Perhaps more importantly, additional 700 MHz spectrum is needed so that Rogers can provide ubiquitous LTE mobile broadband coverage to Canadians living and working in urban, suburban and rural Canada.¹²

25. Along with other parties as demonstrated above, Bell Mobility strongly believes that the Department must ensure that national providers have a fair chance to access 700 MHz in both rural and urban areas in order to provide ubiquitous LTE mobile broadband coverage to Canadians living and working in urban, suburban and rural Canada. As MTS Allstream notes, the current allocation of low band spectrum is simply insufficient to bridge the wireless broadband needs of rural regions given existing deployment.

26. Similarly, Rogers, citing a February 2011 report from the Global Mobile Suppliers Association (GSA), supports the view that the existing cellular 800 MHz band will not be available to meet the exploding demand, when it notes that:

LTE technology and consumer devices will not be available for the 850 MHz band for many years to come. We note that, in a February 2011 report, the Global Mobile Suppliers Association (GSA) indicates that 180 operators are investing in LTE around the world and that there are no LTE user devices that are currently being manufactured for operation in the North American 850 MHz cellular band. In any event, since the 850 MHz band will continue to be used by Rogers to serve its millions of customers and roamers that use legacy technologies such as GSM and HSPA, the capacity required to implement reliable LTE services will not be available in Rogers' licensed 850 MHz spectrum. We believe that the major U.S. carriers are in precisely the same position and that this is why there will be no movement towards the manufacture of LTE devices for use in the 850 MHz band for several years.¹³

27. Indeed, echoing the concern identified in Bell Mobility's Comments that the intention of Government policy is surely not to damage a national player TELUS notes that:

Government must take care in its efforts to establish new entry not to distort the market or undermine the new level of incumbent competition facilitated by the launch of competing GSM/HSPA networks. Ten years ago TELUS was primarily a regionally based telephone company operating out of western Canada. By investing billions of dollars over the last decade TELUS has become a new and

¹² Rogers, page 3.

¹³ Rogers, page 16.

viable national competitor not only in the wireless business but also, as a result of its successes in that market, a national enterprise telecom business and subsequently a national e-Health provider.¹⁴

28. Significantly, Bell Mobility notes that municipalities, representing almost seventy communities, strongly supported an open auction to ensure that their communities were included in the mobile broadband revolution. The consistent theme of these numerous submissions was to request that Industry Canada ensure that the auction did not leave their communities behind by favouring those entities who have a track record of concentrating on larger urban centres. Like Bell Mobility, these municipalities believe that an open and transparent auction is the best way to ensure that their communities benefit from the productivity enhancing capabilities of mobile broadband.

29. In this regard, the record of the proceeding contains submissions from municipalities, ranging from the Town of Aurora to the Township of Muskoka Lakes as well as the Brockville and District Chamber of Commerce, noting their support for a policy that will see broadband wireless technology rolled out to their communities. Typical of these submissions is that from Temiskaming Shores which requests that Industry Canada:

Please ensure that Canadians everywhere can benefit equally by setting spectrum auction rules that do not provide special treatment to any wireless provider, let alone to those that choose to offer services only to Canadians located in the biggest cities. Ongoing wireless expansion across the country absolutely depends on a fair and open market auction. Don't let communities like ours be left behind when the next generation of wireless technology rolls out.¹⁵

30. Similarly, the Township of Muskoka Lakes also expressed its strong support for an open auction in its submission stating that:

Our concern is that Muskoka Lakes is not passed by when the next generation of wireless technology rolls out. Accordingly, on behalf of the residents and businesses of Muskoka Lakes I wish to express our strong support for an open and transparent mobile spectrum auction, with no special treatment for any wireless provider or those that only offer services in Canada's biggest cities. As such all communities across the country - including growing communities like ours - can benefit equally through a fair and open market auction.¹⁶

¹⁴ TELUS, page 15.

¹⁵ City of Temiskaming Shores, Submission to *Consultation on a Policy and Technical Framework for the 700 MHz Band and Aspects Related to Commercial Mobile Spectrum (SMSE-018-10)*, 25 February 2011, page 1.

¹⁶ Township of Muskoka Lakes, Submission to *Consultation on a Policy and Technical Framework for the 700 MHz Band and Aspects Related to Commercial Mobile Spectrum (SMSE-018-10)*, 25 February 2011, page 1.

3.0 700 MHZ BAND PLAN ISSUES AND CONSIDERATIONS

31. Industry Canada's Consultation discussed four band plan options for consideration as possible band plan alternatives for Canada. The Consultation requested that parties provide their view as to which of the options presented they preferred for adoption in Canada.

32. At paragraph 25 of its Comments Bell Mobility took the position that Industry Canada should substantially adopt the U.S. band plan, including any adjustments that may occur to the U.S. band plan between now and the licensing of the Canadian 700 MHz band. Bell Mobility noted that the supporting arguments for adopting the U.S. band plan included:

- Harmonization of equipment specifications to the maximum extent possible, thus enabling economies of scale and greater equipment availability for consumer and infrastructure equipment;
- Facilitating international roaming; and
- Facilitating cross-border frequency coordination.

33. Bell Mobility notes that the vast majority of respondents supported adopting the U.S. band plan. The RABC, for example, which has representation from virtually all significant spectrum using industries and associations in Canada, stated that:

The RABC recommends that the Department adopt Option 1 which is to harmonize with the U.S. band plan. While Option 1 is not "perfect" it is the only option that will work due in part to the ready availability of standards and equipment. The RABC further recommends that IC should keep step with the U.S. band plan, including guardbands, should the U.S. choose to make modifications before the Canadian auction begins.¹⁷

34. Rogers, for its part, also supported adopting the U.S. band plan and noted, echoing Bell Mobility's Comments regarding the developing LTE ecosystem in the U.S., the following rational in support of that recommendation:

We believe that this course will satisfy the criteria that the Department has identified to a greater extent than the other options. . . . two of the largest wireless carriers in the U.S. are already implementing LTE in the 700 MHz band. This means that an important ecosystem is already developing on the basis of the U.S. 700 MHz band plan. Harmonizing with the U.S. 700 MHz band plan will allow Canadian operators and their customers to benefit from the availability of a wide variety of LTE radio network technology and consumer devices and

¹⁷ RABC, page 12.

applications. The economies of scale associated with this ecosystem will benefit Canadians in terms of lower cost, availability of technology and devices, and ongoing development of and support for services and applications. Significantly, it will also enable cross-border roaming and allow simpler cross-border frequency arrangement and coordination procedures.¹⁸

35. The RABC, along with a number of other parties, also proposed a slight modification to the U.S. band plan as follows:

The RABC has identified a minor deviation from the U.S. band plan that should be considered by the Department since it would allow more operators to acquire scarce 700 MHz spectrum in the upcoming auction. Specifically, the paired block 746-757 MHz / 776-787 MHz (known as the "Upper C block") could be split into two paired blocks of 5+5 MHz (e.g., 746-751 MHz / 777-782 MHz and 751-756 MHz / 782-787 MHz).¹⁹

36. The RABC noted that while its proposal would represent a deviation from the size of the block that was licensed in the U.S., it would not violate the fundamental structure of the U.S. band plan and would maintain the upper and lower limits of the Upper C block. The RABC explained that this means that consumer devices designed for operation in the Upper C block in the U.S. could be used by Canadian licensees of either of the sub-blocks proposed in its recommendation. The RABC further noted that precedent does exist, i.e. with respect to the licensing of the PCS band, where Canada has successfully employed a similar minor deviation from the U.S. band plan.

37. In light of all the above, Bell Mobility submits that Industry Canada should harmonize the Canadian 700 MHz band plan with the U.S. plan with the minor deviation as proposed by the RABC above, as well as numerous other parties, to split the Upper C block into two paired blocks of 5+5 MHz.

4.0 GUARD BANDS

38. The Consultation noted that the band plans options presented in the paper included guard bands. As a result, the Department inquired as to whether it should auction the guard bands or whether these frequencies be held in reserve for future use such that they are technically compatible with services in the adjacent bands.

¹⁸ Rogers, page 25.

¹⁹ RABC, page 16.

39. Bell Mobility noted in its Comments that guard bands provide isolation from interference and in that manner contribute to spectral efficiency. We also noted the Consultation's comment that there is uncertainty concerning the availability of radio equipment that can be deployed in the frequency range used in the guard bands at this time. In light of these considerations, Bell Mobility recommended that the guard bands should not be auctioned but rather that they should be kept in place to ensure spectral efficiency.

40. Bell Mobility submits that, of the parties who addressed this issue, all supported the retention of guard bands as a means of providing isolation from interference and thus contributing to overall spectral efficiency.

41. Bell Mobility also supports the view expressed by Rogers, at paragraph 73 of its comments, when it stated that:

Rogers does not support the notion that these guard band blocks should be reserved by the Department for future use. The use of this spectrum for any purpose other than to prevent harmful interference to licensed commercial mobile systems would be counter productive to the objective of licensing the 700 MHz band for advanced new commercial mobile broadband services.²⁰

42. As Rogers notes, the use of guard bands for the sole purpose of avoiding interference will be essential for the orderly rollout of reliable and high quality services. This is especially important in the case of the 700 MHz band given the limited amount of spectrum available. In the absence of these guard bands, Rogers noted, carriers would be forced to implement guard bands from within their commercial spectrum holdings leaving them with even less spectrum to provide mobile broadband services to Canadians.

43. Consequently Bell Mobility reiterates that the guard bands should be kept in-place to ensure spectral efficiency and that the Department should not consider the frequencies as being held in reserve for future use. This position would also be consistent with the Department's treatment of guard bands in its recent decisions regarding the band plan, including guard bands, for Broadband Radio Service.

²⁰ Rogers, page 27.

5.0 PUBLIC SAFETY SPECTRUM

44. Industry Canada's Consultation outlined three options with respect to designating spectrum for use by broadband public safety and/or commercial systems in the sub-bands 758-768 MHz and 788 -798 MHz or the "D" Block. The Consultation invited comments regarding the proposed options and also posed a number of related questions on which it also sought comment.

45. In its Comments, Bell Mobility noted that the U.S. 700 MHz band plan includes an allocation of 10 MHz of spectrum for the public safety sector in that country. Therefore, consistent with the recommendation to harmonize with the U.S. 700 MHz band plan, Bell Mobility recommended that Canada should follow suit and include a 10 MHz public safety allocation in its band plan.

46. Bell Mobility further noted that the U.S. is currently considering its treatment of the "D" block and that there may be an opportunity for public safety to acquire additional spectrum as a result of that proceeding. In light of this, Bell Mobility recommended that Industry Canada should defer its consideration of the "D" block in Canada until such time as we are aware of the licensing approach chosen in the U.S. Industry Canada could then hold a separate consultation in Canada to consider the appropriate Canadian policy.

47. Of those parties that addressed the issue, virtually all agreed that Industry Canada should defer its consideration of the "D" block until the situation in the U.S. is resolved.

48. Rogers summed up the situation succinctly when it stated that:

The net result of the situation in the U.S. is that there is no ecosystem for D Block spectrum and this situation will remain unchanged until the U.S. government decides how it will license this spectrum and determines the services for which the spectrum will be licensed.

In light of the considerable uncertainty in the U.S. regarding D Block spectrum, and the lack of an ecosystem for this spectrum, the Department should defer any consideration, decision and licensing of D Block spectrum until the situation in the U.S. has been resolved. Once the situation has been clarified, the

Department should initiate a separate consultation to consider the licensing of D Block spectrum in Canada.²¹

49. Bell Mobility therefore reiterates its recommendation that Industry Canada should defer its consideration of the "D" block in Canada until such time as we are aware of the licensing approach chosen in the U.S. Industry Canada can then hold an informed separate consultation in Canada to consider the appropriate Canadian policy.

6.0 TIER SIZES

50. The Consultation sought parties' views on which tier size or combination of tier sizes should be used for the auctioning of the 700 MHz band in Canada.

51. Bell Mobility proposed that the Department should license the 700 MHz spectrum on the basis of uniform Tier 2 service areas at a minimum. Bell Mobility's Comments noted that the primary benefit of Tier 2 service areas includes facilitating spectral efficiency and mitigating interference issues both domestically and at the border while Bell Mobility considers that larger service areas are always more efficient, they are especially so in the case of 700 MHz, given that larger service areas enable licensees to take advantage of the propagation characteristics of this band. A number of parties are of a similar view with respect to tier sizes.

52. Quebecor, for example, in strongly recommending Tier 2 licences notes that:

Selection of this service area tier would permit optimal utilization, from a geographic standpoint, of the superior propagation characteristics of the band. QMI agrees fully with the Department's statement at page 29 of the Consultation Document that "The propagation characteristics of the 700 MHz band are most conducive to high mobility applications due to low over-the-air propagation losses ...".

Tier 2 licences, by avoiding geographic fragmentation, also permit increased spectral capacity, and QMI shares the Department's perspective when it affirms at page 29 of the Consultation Document that "Licensing this spectrum based on larger geographic areas would result in fewer neighbouring service providers, translating into less coordination between licensees and more effective use of radio spectrum."

²¹ Rogers, page 31.

In light of all of the above, the upcoming auction of commercial spectrum in the 700 MHz band should be based on a single service area tier, and this tier should be the second.²²

53. For its part SaskTel, while noting the absolutely minimum tier size acceptable to it is Tier 3, states that:

SaskTel believes it would be most advantageous to utilize uniform tier sizes across all spectrum blocks, and that . . . Tier 2 service areas should be used for the 700 MHz spectrum auction. Common tier sizes facilitate substitution among blocks during the auction, resulting in a more efficient allocation of licenses.²³

54. Bell Mobility continues to be of the view that uniform Tier 2 licences would make more effective use of the available radio spectrum. Bell Mobility further believes that this is a particularly important consideration given the very limited amount of 700 MHz spectrum available for commercial licensing.

55. Subsequent to its review of the record of the Consultation Bell Mobility does, however, believe that further measures are required to ensure that this valuable spectrum, once licensed, is deployed to Canada's rural and remote areas as well in its urban cores. These measures are further addressed below in the section *Promoting Service Deployment in Rural Areas*.

7.0 TREATMENT OF EXISTING SPECTRUM USERS

56. Industry Canada's Consultation noted that in addition to over-the-air TV broadcasting, low-power devices, including wireless microphones, are currently licensed in the 700 MHz band. In this regard, Industry Canada stated, that while full power TV broadcasting will be transitioned out of the band, no decision has been made regarding the treatment of low-power TV (LPTV) broadcasting which may continue to operate in the band following the DTV transition. Furthermore, no firm date has been established after which the use of low-power wireless devices, including wireless microphones, will be prohibited in the bands 698-764 MHz and 776-794 MHz.

²² Quebecor Media Inc. (Quebecor), Comments in Response to *Consultation on a Policy and Technical Framework for the 700 MHz Band and Aspects Related to Commercial Mobile Spectrum (SMSE-018-10)*, 28 February 2011, page 6.

²³ SaskTel, page 17.

57. As a result, in the Consultation, the Department proposed a transition policy such that effective immediately, no new broadcasting certificates will be issued for LPTV stations in TV channels 52-59 (698-746 MHz). The Department also proposed that the displacement of the incumbent LPTV stations be subject to a notification period of one year for LPTV stations located in urban areas or in specific geographic areas, such as along highway corridors; and a period of two years for LPTV stations in all other areas. The Department further noted that a displacement notification can be issued only after a technical determination is made concluding that continued operation of the incumbent LPTV station would impede the deployment of new licensed systems in the 700 MHz band.

58. Regarding the use of the band 698-806 MHz by low-power licensed radiocommunication devices, including wireless microphones, currently subject to licensing on a no-protection, no-interference basis, the Department proposed to permit low-power licensed devices, including wireless microphones, to operate in the band 698-764 MHz and 776-794 MHz only until 31 March 2012.

59. Bell Mobility's Comments supported Industry Canada's proposed transition policies and timeframes, outlined above, regarding the proposed treatment of existing spectrum users. We note that the vast majority of parties, addressing the Department's proposals, also supported the transition policies and timeframes.

8.0 CHANGES TO CANADIAN TABLE OF FREQUENCY ALLOCATIONS

60. The Consultation sought comments on a number of proposed changes to the Canadian Table of Frequency Allocations for the band 698-806 MHz.

61. Bell Mobility's Comments, along with the comments of virtually all parties addressing the issue, supported the proposed changes to the Canadian Table of Frequency Allocations for the band 698-806 MHz as outlined in the Consultation.

9.0 SPECTRUM UTILIZATION POLICY

62. The Consultation noted that in RP-014, issued in 1995, Industry Canada clarified the definition of a cellular mobile radio service (CMRS), and placed no limitations on the types of mobile radio or personal communications applications to be deployed in the cellular mobile

bands. The Department further proposed, in the Consultation, to refer to the commercial radio systems to be deployed in the 700 MHz band as Mobile Broadband Services (MBS). The MBS systems would be compliant with the RP-14 definition for CMRS. Subject to technical compatibility considerations, Industry Canada proposed that there will be no restrictions on the services to be offered by licensees under MBS. Industry Canada noted that the 700 MHz band will be dedicated to MBS with the exception of any frequency ranges possibly designated for public safety.

63. The Consultation sought comments regarding the spectrum utilization policy outlined above.

64. Bell Mobility notes that it and virtually all parties addressing the issue were in agreement with the proposed spectrum utilization policy.

10.0 PROMOTING COMPETITION

10.1 State of Competition

65. Industry Canada's Consultation sought comments on the current state of competition in the Canadian wireless services market.

66. Noting that Canada is a world leader in wireless, Bell Mobility's Comments demonstrated that the Canadian wireless market has, in the past, benefited from the relative freedom from regulation. This less-interventionist policy approach has allowed Canada's wireless companies to adapt and grow, in order to be competitive and deliver innovative wireless services to Canadian consumers at affordable prices. As a result, the Comments noted, competition between wireless network providers has resulted in billions of dollars being invested in new technologies and services. For example, 96% of Canadians now have access to HSPA+ networks that can offer mobile broadband speeds up to 21 Mbps and steps are being taken to upgrade this to 42 Mbps; Canada's wireless service prices compare favourably to similar countries; and Canada has among the lowest wireless service revenues as a percentage of GDP. As a result of the combination of network quality and affordable prices, Canadians have among the highest average voice minutes per month.

67. Yet Industry Canada's Consultation requests comments on whether more should be done to improve the level of competition. This urge to micromanage the wireless market, Bell Mobility submitted, is being driven by inaccurate claims by some that the industry is not competitive enough. This misperception is fuelled by reports featuring sensational titles and little evidence. These claims, in Bell Mobility's view, are being made by those who stand to benefit from Government intervention. The reality, as the Comments demonstrated, is that the Canadian industry shows all the markings of intense competition. It is a lively market in which competitors gain and lose ground every quarter.

68. Bell Mobility noted that given the significant capital investments in network technology and product distribution that are required to build out the next generation of wireless services, it may be the case that the existing number of providers will not remain. Not all service providers will be able to reach a large enough scale and/or scope in order to minimize costs. This is especially true in telecommunications industries which require large fixed and sunk costs. As a result, it should not be surprising then that consolidation may occur. Further, this reality is not lost on AWS new entrants who, as the Comments demonstrated, have themselves publically mused about the inevitability of the consolidation that will need to occur.

69. Bell Mobility submits that the comments of a number of parties corroborate the above view of the Canadian wireless industry.

70. Regarding the competitive state of the Canadian wireless industry Rogers states that:

. . . Rogers submits that the Canadian wireless market has been highly competitive in the past and that competition has become hyper-competitive more recently. Rogers bases this determination on several factors including the number of competitors in the Canadian wireless market. However, while new entrants have had an impact, Rogers notes that the most important competitive impact on Rogers has been the increased competition among incumbent providers due to Bell and TELUS' move to launch a competing HSPA+ network.²⁴

71. TELUS, in a similar vein, submitted comments that:

Canada has more facilities based players than most jurisdictions, in particular in key metropolitan areas. Virtually every Canadian has at l[e]ast three wireless voice and data options and this reaches as high as six in the Greater Toronto Area (and there is the potential for a seventh). Globally, wireless markets have been challenged to support more than three or four wireless carriers as many of

²⁴ Rogers, page 36.

the smaller wireless players looked to consolidate in order to gain sufficient economies. Many markets recognize how challenging it is to support over four players and even Australia, a country with a similar geography to Canada, has consolidated from four operators down to three.²⁵

72. Nordicity, in an analysis filed with TELUS' submission, sums up the state of competition in the Canadian wireless market as follows:

The number of Canadian wireless subscribers has increased by more than seven million during the past five years, and competition for those subscribers has been fierce. Historically, wireless competition has been dominated by the five wireless providers that have offered service for more than a decade – TELUS, Bell, Rogers, SaskTel, and MTS. During the past two years, however, an additional four wireless carriers – Wind Mobile, Videotron, Public Mobile and Mobilicity – have launched and it is anticipated that two more – EastLink and Shaw – will launch service within the next year. Whether examined in terms of the five historical wireless competitors, or with regards to current and future competition from the 2008 AWS entrants, Canada's wireless sector has significant competition at the national and regional levels.²⁶

73. Indeed, concluding that Canada's wireless prices and market structure compare favourably with other developed wireless sectors around the world, Nordicity's analysis determines that:

Markets such as the US, which has ten times more wireless subscribers and more than double the density of subscribers as Canada, struggle to support more than four wireless carriers, further confirming the natural structure of Canada's wireless market. In fact, in Australia, a market very similar in terms of population and geography to Canada's, the third- and fourth-largest carriers merged in 2009 to create a market structure almost identical to Canada's.²⁷

74. Similarly, as previously noted above, consolidation continues in the U.S. market as well with the proposed acquisition of T-Mobile USA by AT&T which was announced on 20 March 2011, subsequent to the filing of Bell Mobility's Comments.

75. Bell Mobility agrees, in this regard, with Rogers view that:

The new entrants have not been the only, or even the most important recent competitive impact on Rogers. Rogers submits that Bell and TELUS' competing HSPA+ network has radically changed the competitive landscape. Bell and TELUS have traditionally supported CDMA wireless network technologies rather

²⁵ TELUS, page 30.

²⁶ Nordicity, *Competition and New Entry – An Analysis of Canada's Communications Services Market*, February 2011, page 7.

²⁷ Nordicity, page 64.

than the global standard known as GSM. With the launch of their joint HSPA+ network, Bell and TELUS offer the newest handsets which were not available for use with their CDMA networks. In addition, customers can use their existing unlocked HSPA phones when they port between the three incumbent carriers. As well, Bell and TELUS are better able to benefit from international roaming with HSPA than with CDMA. This has increased competition between the three incumbents as customers have more choice in which carrier will provide outbound and inbound HSPA roaming.²⁸

76. Regarding the underlying reasons behind the state of vigorous competition in Canada's wireless market, especially when considering the impact of the Department's 2008 AWS auction, Bell Mobility concurs with TELUS' view that:

It might be tempting to conclude that the pricing declines and usage increases noted above are the product of the beneficial rules granted to entrants in the AWS auction. However, such a conclusion would ignore the fact many of these developments had nothing to do with the government's design of the AWS auction. In fact, many of these developments are far more attributable to the competitive activities in recent years of the existing wireless carriers, and the motivation of some incumbents, including TELUS, to break up Rogers' GSM monopoly. These activities include the launch of HSPA+ networks, giving Canada a world leadership position in the deployment of advanced networks. The availability of such networks gives Canadian consumers access to the best network speeds and the ability to use the latest wireless devices, offered by multiple competing carriers in most cities in Canada. The fierce incumbent competition in the smartphone segment is the biggest reason why entry level and average prices have declined and there has been such a significant increase in wireless data usage by Canadians.²⁹

77. Bell Mobility submits that this action, i.e. the breaking up Rogers' GSM monopoly, was driven by market forces and in particular the decisions by Bell Mobility and TELUS to implement separate strategies to address unacceptable competitive deficiencies in their networks and related product lines. As TELUS notes, this, and not the AWS auction rules, is the actual reason for pricing declines and usage increases in the Canadian market.

78. Based on our review of the comments of other parties, Bell Mobility continues to believe that in consideration of the present circumstances, there is absolutely no need or rational basis for any artificial regulatory measures intended to increase or sustain competition in either the 700 MHz or the 2500 MHz spectrum auctions. To the contrary, Bell Mobility submits that as demonstrated in its Comments, as well as in the record of this proceeding, the circumstances existing in the Canadian wireless market simply do not warrant the interventionist measures

²⁸ Rogers, page 41.

²⁹ TELUS, page 32.

raised for consideration in this Consultation. There is no evidence of the failure of competitive market forces that would justify continued Government intervention. Indeed, as shown above, the real source of increased competitive activity in the market results from competition between national providers which has served to dramatically alter the competitive intensity of the Canadian wireless market. Further, as demonstrated above, this increased competitive activity would have occurred irrespective of the AWS auction. Bell Mobility reiterates therefore that the available evidence suggests that the Canadian wireless industry is a competitively functioning market that does not require fixing.

10.2 Bell Mobility – TELUS Infrastructure Sharing

79. On a separate item, despite the fact that the Bell Mobility and TELUS infrastructure sharing arrangement, as demonstrated by the record of the Consultation, was the catalyst behind significantly increased competition in the Canadian wireless industry, some parties, e.g. Shaw, suggest that as a result Bell Mobility and TELUS should be treated as associated entities for the purposes of the 700 MHz auction. Bell Mobility and TELUS are not associated entities. This would be highly inappropriate and damaging to the development of the Canadian wireless industry.

80. Bell Mobility strongly considers that such a proposal, considering the benefits to Canadians resulting from this innovative infrastructure approach, is not warranted and would be inappropriate. The Bell Mobility and TELUS infrastructure sharing arrangement of 2008, as noted by Rogers, enabled the most significant competitive event in the Canadian wireless industry, i.e. the launch of competing HSPA + networks, exceeding even any competitive impact resulting from Industry Canada's AWS auction framework. The launch provided millions of Canadians with viable competitive choices while using the latest wireless devices. It also captured network efficiencies which enabled the expansion virtually overnight of HSPA + wireless broadband technology throughout Canada, including to rural and remote areas that otherwise would have been left out of the wireless broadband revolution. As noted above, this is particularly significant given the demand for wireless broadband in those rural areas. Surely, it is not the intent of Government policy to discourage such innovative arrangements that have brought increased competition to Canadians and increased efficiencies to the wireless market.

81. These types of innovative network coverage arrangements are occurring throughout the industry, e.g. the Rogers – MTS Allstream arrangement, the Rogers – Tbaytel arrangement and

the 2001 Bell Mobility – TELUS CDMA arrangement. These arrangements provide benefits to Canadians and, through the strategic extension of advanced networks into rural and remote areas, to Canada overall. Industry Canada, in recognition of the benefits of such joint network builds, has endorsed such arrangements and has not found, in previous auctions, that they attract associated entity status. To be clear, however, even with a joint build arrangement each party still requires its own spectrum to serve its many millions of wireless subscribers. Bell Mobility, for example, continues to require its own additional spectrum to build out its national networks as it aggressively competes with TELUS, Rogers, new entrants and regional licensees for new wireless subscribers. To its credit Industry Canada has not blocked or interfered with such innovative commercial arrangements. Reversing this position today, by suggesting that Bell Mobility unwind an arrangement which has generated significant benefits for Canadians and particularly those living in rural areas, would fly in the face of the Government's broader productivity agenda.

82. In addition, as indicated above, not only do Bell Mobility and TELUS respectively compete with others for customers' wireless business, we compete with each other in the market place. The nature of the infrastructure sharing is such that it is totally transparent to a customer whose air interface is being used to provide them with service. For example, even though served from a Bell Mobility air interface, if a customer has chosen TELUS as their supplier of choice, then as far as that customer is concerned TELUS is their supplier. Again, the end result is providing customers with competitive choices and in many cases in areas where, absent the infrastructure sharing, there would have been less or even no choice at all.

83. It should also be noted that there is nothing prohibiting or preventing other wireless carriers, i.e. national providers, new entrants or regional incumbents, from participating in such commercial arrangements. Indeed, even the Department's November 2007 *Policy Framework for the Auction for Spectrum Licences for Advanced Wireless Services and other Spectrum in the 2 GHz Range*, recognized similar arrangements, in addressing who qualifies for mandated national roaming, when it stated that:

A national new entrant is defined as a new entrant that has acquired licences for all Tier 2 or Tier 3 service areas, or a combination of Tier 2 and Tier 3 service areas, covering all of Canada in the AWS or PCS bands. This definition includes a group of new entrants collectively holding all Tier 2 or Tier 3 service areas, or a combination of Tier 2 and Tier 3 service areas, covering all of Canada in the

AWS or PCS bands and cooperating to provide a national service.³⁰ (Emphasis added)

84. Finally, in this regard, as demonstrated in the usage data filed in confidence with Industry Canada, even the combined wireless networks of Bell Mobility and TELUS are insufficient to meet the projected demand for mobile data from their respective customer bases. Clearly, therefore to treat Bell Mobility and TELUS as associated entities would not only serve to handicap two of Canada's national providers but would also handicap the millions of customers served by these two competitors. Bell Mobility and TELUS each have approximately seven million customers. Each therefore requires sufficient spectrum capacity to serve a combined total of approximately fourteen million customers. To suggest that Bell Mobility and TELUS serve their fourteen million customers with spectrum capacity only sufficient for half that number would have dramatic negative implications regarding future network performance and competitiveness, for both carriers and their customers. Bell Mobility notes that further difficulties regarding the application of spectrum caps is addressed separately below.

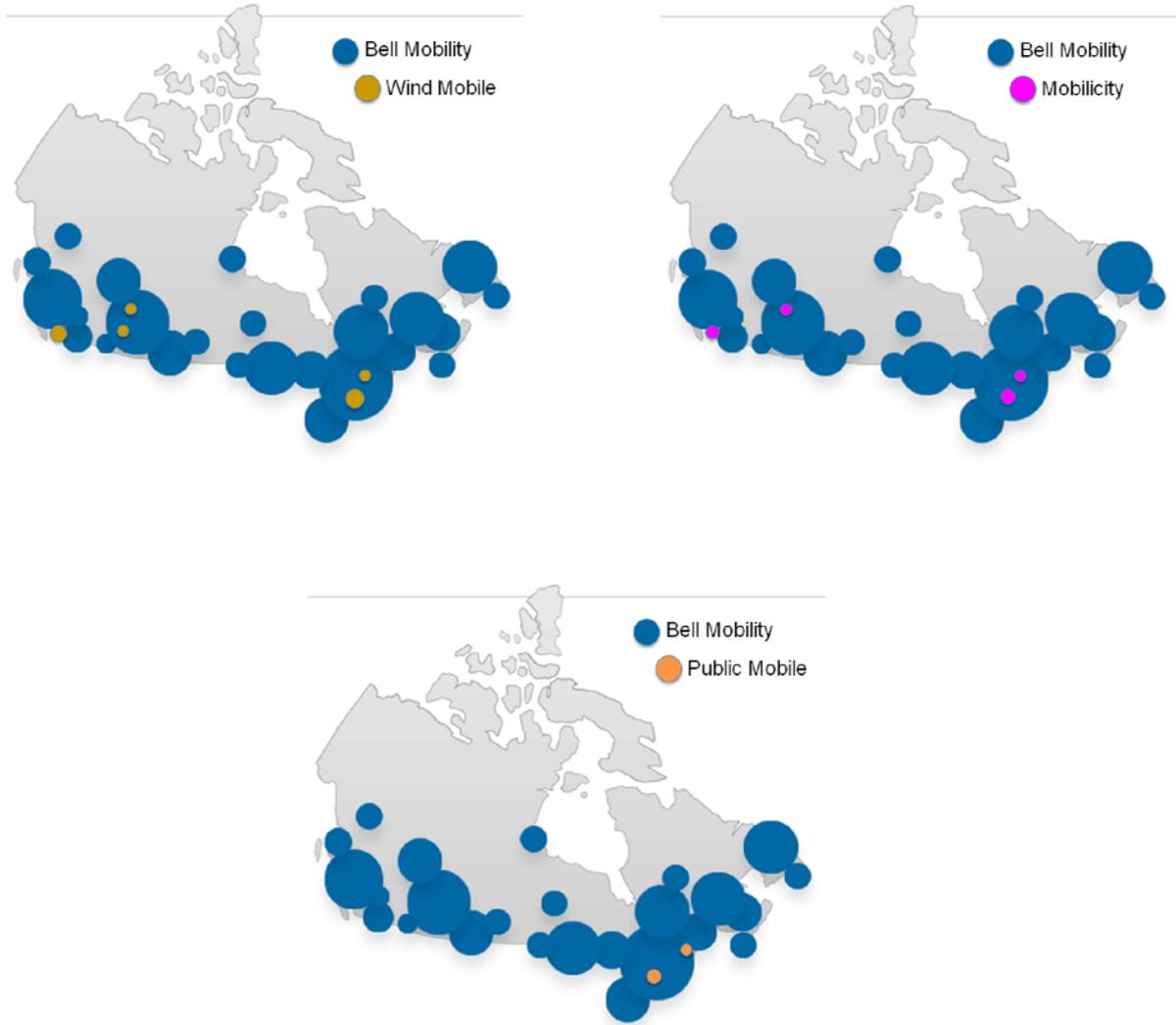
10.3 Competition in Rural Areas

85. Bell Mobility stated in its Comments that the spectrum set-asides in the AWS auction only encouraged more entry in areas that are already well-served, and did nothing at all to help rural areas. Bell Mobility noted that it has been leading the industry by aggressively investing in its wireless networks in both rural and urban areas. This enables Bell Mobility to offer rural customers innovative services like the Turbo Hub, which connects up to 15 Internet devices in one location, with download speeds of up to 21 Mbps and upload speeds of up to 5.7 Mbps.

86. It is undeniable that the new entrants do not target rural and remote areas in bringing their services to market. As of February 2011 even a cursory review of the service rollouts of the three wireless new entrants shows none has plans to serve rural and remote Canadians. Wind Mobile's network is operational solely in the Greater Toronto Area, Hamilton, Ottawa, Calgary, Edmonton, and Vancouver. Mobilicity's network is operational solely within the Greater Toronto Area, Ottawa, Edmonton and Vancouver. Finally, Public Mobile Inc.'s home network currently covers only Greater Montréal and Toronto.

³⁰ Industry Canada, *Policy Framework for the Auction for Spectrum Licences for Advanced Wireless Services and other Spectrum in the 2 GHz Range*, November 2007, page 8.

Figure 1



87. This has important ramifications for rural and remote Canadians and therefore for how the 700 MHz and 2500 MHz auctions should be designed. To the extent that some wireless providers get access to more and/or cheaper 700 MHz spectrum due to special auction concessions designed specifically for them, then Bell Mobility (as well as other national providers) will have to use additional resources to overcome these competitive disadvantages. That is, Bell Mobility will be required to invest in additional infrastructure in an attempt to try and overcome the problem of not having enough 700 MHz spectrum. In order to achieve the same level of coverage and capacity as 700 MHz spectrum, additional network facilities such as towers, cells and backhaul will be required in both urban and rural areas. These additional facilities will be required even in areas where Bell Mobility has already installed network

infrastructure. The Comments noted that these are scarce resources that would otherwise have been allocated to rural and remote areas. Such a re-allocation of capital will affect the rollout of new digital infrastructure especially in areas where the business case for expanding coverage is marginal. Ultimately, the slowing, or indeed even the halting, in the deployment of next generation wireless infrastructure in rural areas will manifest itself in terms of diminished business productivity and competitiveness for Canadian businesses in those areas. This will be detrimental to the Canadians who live and work in those rural areas.

88. Other parties were of a similar view. SaskTel, for example, states that:

The measures adopted in the AWS auction to promote competition in urban areas at this point have had limited impact on the delivery of service to rural areas. What impact they did have on rural consumers was generally negative as it drove the price of spectrum in rural areas up to extraordinary levels limiting the ability of incumbent WSPs to create a business case for expansion. Despite the increased competition for spectrum no additional competitors have used that spectrum to enter the Saskatchewan marketplace, nor are they likely to do so other than in some urban areas.³¹

89. Rogers encapsulates the conundrum when states in its comments that:

Building a wireless network is capital intensive. Building a wireless network in a remote region is even more so. Not only must towers be built, but remote sites often require new roads, trails for hydro lines and on site generators. Large amounts of machinery, including helicopters, may also be required.

Operational expenses in remote areas are also far higher. Backhaul in particular can be extremely expensive as new microwave networks have to be deployed or satellite systems engaged. With light populations, it is often impossible to justify any investment in these areas.

It is for these reasons that resources such as the 700 MHz spectrum be properly used. With its superior propagation characteristics, the 700 MHz spectrum is one of the best tools to reach rural Canadians.

Without 700 MHz spectrum Rogers will simply be unable to deploy LTE outside large urban areas. The economics will force us to limit the service to only the top population centres in the country. The 700 MHz spectrum is key to making deployment feasible in rural and smaller urban areas. It is therefore crucial that carriers committed to delivering service in smaller centres and rural and remote areas, today and not tomorrow, have access to it.³²

³¹ SaskTel, page 22.

³² Rogers, page 93.

90. Similarly, in addressing the deployment of wireless broadband to rural areas, TELUS notes:

In order to ensure that the next stage of 4G and LTE investment occurs in both urban and rural locations, those most likely to make investments must have at least the opportunity to bid unimpeded for the spectrum such broadband networks require.³³

91. Bell Mobility strongly supports TELUS' view that Canada's established telecommunications carriers, who have the scale, resources as well as considerable experience of serving many remote and rural areas, are the entities who are most likely to make the investments in rural Canada and, as a result, must have at least the opportunity to bid and compete unimpeded for the 700 MHz spectrum that will enable such broadband networks. As noted above however, to enable ubiquitous mobile broadband coverage, this is also dependent on an open auction in urban areas as well.

10.4 Impacts of Government Measures Adopted in the AWS Auction

92. At the outset Bell Mobility notes that even Quebecor, a major beneficiary of the AWS set-aside, does not propose adoption of a set-aside for the 700 MHz auction:

QMI does not seek guaranteed access to the 700 MHz resource. We will compete with others to acquire it.³⁴

93. Bell Mobility submits that Quebecor's comment should be adequate proof for Industry Canada that such enterprises are more than capable of bidding in an open auction without Government assistance. Moreover, if Quebecor is capable of competing in an open auction, certainly so too are Shaw and Vimplecom. Surely Government will not be offering assistance to entities who are not even seeking it.

94. Bell Mobility notes in its Comments that the AWS set-aside increased the costs to the industry by hundreds of millions of dollars by artificially reducing the supply of spectrum available for national providers and by creating gaming opportunities that altered the efficient allocation of spectrum. Our Comments noted that this resulted in a disproportionate cost burden being borne by the national providers. As demonstrated in the Comments, the gaming opportunities were the result of the new entrants' ability to "park" their points on both restricted

³³ TELUS, page 11.

³⁴ Quebecor, page 1.

and unrestricted spectrum. That is, the new entrants had the incentive to bid on spectrum that they did not actually want to buy in order to keep the prices on their desired spectrum from increasing too quickly and to maintain enough eligibility points in order to punish their rivals in later rounds. Bell Mobility's Comments quoted a report by NERA, which was subsequently filed by TELUS as an appendix to its comments, titled *Regulatory Policy Goals and Spectrum Auction Design: Lessons from the Canadian AWS Auction* (or NERA Report):

... parking of points is not uncommon in auctions and is, by itself, not necessarily a reason for concern. However, parking of points can become a problem when combined with a set-aside provision, such as the one used in this auction. That is, the set-aside provision provides an incentive for entrants to park their points on the unrestricted spectrum rather than the restricted, even though there is no difference in terms of eligibility of where the points are parked. In an auction without set-asides, the effect of parking tends to be distributed equally among the bidders because each license bears the same probability of being used to park points. However, in the Canadian AWS auction design, incumbents did not have the opportunity to park points on the restricted licenses. This, coupled with the fact that the entrants had an incentive to park points on the unrestricted spectrum, resulted in unrestricted spectrum being disproportionately subject to the parking of points.³⁵

95. Bell Mobility concluded therefore, that the combination of the restricted supply of spectrum and the gaming opportunities created by the spectrum set-aside used in the AWS auction resulted in the record high prices paid, in some cases as much as three times the price paid for equivalent spectrum in the U.S., for the unrestricted spectrum. Other parties held similar views.

96. Rogers, for example, states that:

As demonstrated in the AWS auction, a spectrum set-aside produces distortions in the auction process. The results of the auction demonstrate that the set-aside had a substantial negative impact on incumbents in the form of artificially high prices. There was a corresponding advantage to new entrants who "gamed" the auction process and were permitted to bid up the price of non-set-aside spectrum with impunity. In addition, the use of the set aside resulted in wide divergence in prices paid for similar licences.³⁶

97. Rogers then provided several examples of widespread differences in the prices of spectrum licences which was most marked when comparing the final prices of identical licences

³⁵ NERA Economic Consulting (NERA), *Regulatory Policy Goals and Spectrum Auction Design: Lessons from the Canadian AWS Auction*, 17 April 2009, available at http://www.nera.com/67_5461.htm, page 31.

³⁶ Rogers, page 78.

between the set-aside and non-set aside prices. In its analysis Rogers concluded that the difference was:

. . . due to the extensive gaming behaviour demonstrated by new entrants in the AWS auction, particularly the "parking strategies" exhibited by a number of new entrants. Normally, as an auction progresses and bidders are forced to drop eligibility points, bidders are required to focus their efforts on the licence areas they truly value. However, new entrants avoided this discipline and continued to preserve eligibility points by bidding on the non set-aside spectrum licences targeted by incumbents. They even bid upon non-set aside licenses when they were more expensive to the set aside equivalent licenses.³⁷

98. For its part TELUS noted that:

We estimate that the national incumbents paid a gaming premium of \$0.52 cents per-MHz-pop for their spectrum in relation to the new-entrant set-aside spectrum. Set-aside spectrum sold on average for \$1.26 per MHz-pop while unrestricted spectrum was driven by new entrant gaming to an average of \$1.78 per MHz-pop. In other words, national incumbents paid \$800 million more for their spectrum than the new entrants due to the design of the AWS spectrum.

In effect, on top of the almost \$4 billion loss in market capitalization suffered at the time of the updated COL and AWS auction framework announcement, and on top of the matching premium of \$750 million that had to be paid at the AWS auction, national incumbents paid a \$800 million gaming premium at the AWS auction. Cumulatively these impacts represent an over \$5.45 billion extraction of rent on national incumbents and roughly one third of it (\$1.55 billion) flowed directly to the Government of Canada.

The fact that the prices in Canada's AWS auction were three times higher than those of the U.S. AWS auction on a per-MHz-pop basis reinforces this view that these premiums resulted from Industry Canada's intervention via the new retroactive COLs and AWS auction design, and therefore, were essentially indirect extractions of economic rent from national incumbents.³⁸

99. It is easy to see that the new entrants were able to effectively use the asymmetry of the spectrum set-aside rules to minimize their own costs of acquiring spectrum and to drive up the prices paid by the national service providers.

100. The circumstances in the Canadian wireless market simply do not warrant interventionist measures. In this regard, it was noted that while entry-assisting policies such as spectrum set-asides were not required in the AWS spectrum auction, they are certainly not required now due to the entry of Vidéotron, Shaw, DAVE, Public Mobile and Globalive. These existing spectrum

³⁷ Rogers, page 79.

³⁸ TELUS, page 34.

license holders currently have the financial strength to bid for spectrum in the 700 MHz auction and need no Government protection. For example, the enterprise values for: (i) Quebecor – are approximately \$7.5 billion; (ii) Shaw – approximately \$15 billion; and (iii) Orascom – approximately \$33 billion with VimpelCom. Indeed, Quebecor is a regional carrier focused on Québec, while Shaw is a regional carrier focused on Western Canada. The enterprise value of the national carrier TELUS, at \$21 billion, is lower than the combined enterprise value of Quebecor and Shaw at \$22.5 billion, whose combined networks will not cover nearly as much geography as the networks of TELUS. The transfer of wealth, the Comments noted, from the shareholders of one large company to the shareholders of another large company does not improve economic efficiency, nor does it benefit Canadians.

101. Bell Mobility found support for this view in the comments of a number of parties. TELUS noted in its comments that:

Even as the government moves to increase the absolute number of competitors, the market itself is moving to scale through consolidation. Consolidation and market concentration is not merely a Canadian phenomenon but is a trend across the world. There is a general trend to such super-sized consolidation in order to achieve the scale required to support the exponential demand the mobile Internet will create. Consolidation amongst new entrants has been discussed on numerous occasions and Egyptian controlled wireless giant Orascom, the principal shareholder of Globalive, is working to consummate an agreement with Russia's VimpelCom to create the world's fifth largest wireless carrier with over 170 million subscribers.³⁹

102. Subsequent to the filing of comments in this Consultation, on 17 March 2011, Bloomberg reported that VimpelCom won support from shareholders to acquire Wind Telecom SpA in a \$6.5 billion deal that will double VimpelCom's mobile customer base to approximately 173 million subscribers, while, as noted above, on 20 March 2011, AT&T announced its intention to acquire T-Mobile USA.

103. Rogers similarly noted that:

. . . several AWS licenses are large and well-financed companies. These companies do not require any artificially imposed government measures to ensure that they can operate in a competitive market. Given their sheer size and vast revenues, these companies are more than able to hold their own in an open spectrum auction.⁴⁰

³⁹ TELUS, page 7.

⁴⁰ Rogers, page 74.

104. Bell Mobility also questioned the feasibility of even doing a set-aside given the very limited amount of spectrum available in the 700 MHz band. Bell Mobility's Comments noted that due to the need to follow the U.S. band plan, the 700 MHz auction has approximately 50 MHz of FDD paired spectrum available (located in the lower A,B,C and upper C spectrum blocks). Of the 50 MHz of spectrum available, only a subset is currently supported by a viable ecosystem. With the smaller amount of spectrum available, the Comments noted, the imposition of a spectrum set-aside or spectrum cap will have an even greater effect on the auction's ability to efficiently determine who is best able to use the spectrum. The problem is that the capacity constraints are far more restrictive than they were in the AWS auction, especially given the most efficient use of 700 MHz spectrum requires larger blocks of contiguous spectrum. With a spectrum set-aside, Industry Canada would in effect dictate that one major Canadian operator will not even have the chance to obtain the spectrum it needs.

105. Rogers similarly noted, in this regard, that:

There is simply not enough spectrum available to establish a substantial set-aside, especially in light of the incumbents' need for more spectrum.⁴¹

106. Bell Mobility submits that its Comments and those of other parties demonstrates that the use of a set-aside in the Canadian AWS auction did little to enhance competition in the wireless market but rather provided support to enterprises which did not require it, reduced the amount of spectrum available for national providers to bid on at auction and erased hundreds of millions of dollars of value from the books of the Canadian wireless industry in the process. Bell Mobility submits that it was for these and similar reasons that the FCC did not employ a set-aside in its 2008 700 MHz auction. Indeed, as Rogers notes, for similar reasons the use of set-asides ' . . . has fallen out of favour around the world.'⁴²

107. Bell Mobility's review of the record of the Consultation has confirmed our strong belief that an open auction, in which all wireless carriers are free to compete, without artificial restrictions such as set-asides or spectrum caps, will ensure the most successful outcome for the Government. In this regard, the record shows that all interested parties are financially strong entities capable, as Quebecor notes, of competing in the auction. The market-based

⁴¹ Rogers, page 90.

⁴² Rogers, page 80.

auction mechanism, if not interfered with, will ensure that the spectrum goes to those entities that value it the most and who will put it to its most productive use for Canadians.

108. An open auction in which the maximum number of bidders are capable of participating will also maximize the revenue return to Government. Recollecting that the 2008 AWS auction generated over \$4 billion for the treasury, this is not an inconsequential consideration as the Government considers the means available to address a record deficit in the future. In fairness, however, it cannot be all take and no give as far as this industry, so important to Canada's future competitiveness and productivity, goes. Consequently, Bell Mobility also recommends that the Government increase the capital cost allowance (CCA) to 50% for the classes of assets most closely associated with broadband networks as an incentive to speed up mobile broadband infrastructure investments in Canada. Further, for capital investments in those areas identified by Industry Canada as "unserved" or "underserved" in RP-019, a CCA rate of 100% should be introduced to encourage investment in rural areas. These changes would provide a fiscally neutral incentive, to all licensees, to speed up the pace of investment by advancing the timing of capital cost deductions allowable for tax purposes.

10.5 Problems Also Arise with Spectrum Caps

109. Bell Mobility's Comments expressed the view that it is important to recall that the Department, subsequent to a thorough public consultation, rescinded the mobile spectrum cap policy, in *Gazette Notice No. DGTP-010-04 Decision to Rescind the Mobile Spectrum Cap Policy*, August 2004. Bell Mobility submitted that the Department got it right in that decision when it reasoned that the Canadian wireless market continues to be a mature market and the need for spectrum caps is even less relevant than in the early days of the industry. Further, as additional spectrum continues to become available the arguments in support of a spectrum cap to oversee spectrum concentration become weaker and weaker.

110. The Comments also noted, however, that trying to determine the size of the cap will require significant knowledge regarding how the demand for spectrum will evolve. In this regard, Bell Mobility noted that the Waverman-Dasgupta Report, filed as an appendix to its Comments, highlighted that:

There is also an inherent "design" problem associated with spectrum caps, one that should carry particular weight in the current wireless environment. Designers of spectrum aggregation limits by definition will need to conclude (a)

how much spectrum is "enough", and (b) the degree to which spectrum holdings across different bands are perfect substitutes. Making strong conclusions about how much is "too much" or "just enough" would seem particularly foolhardy at a time when the wireless industry is characterised by rapid, but inherently uncertain, projected growth rates for data traffic. Thus one can be reasonably sure that mobile data traffic will double, treble, quadruple or even increase eight-fold over the next five years. However, will the increase in traffic be 32-fold or 16-fold? To such questions, few can know the answer. While it is possible that one can set a spectrum aggregation limit that ends up comfortably meeting the requirements of any and all carriers over the next few years, it is equally possible that one cannot.⁴³

111. Bell Mobility continues to be of the view that given: (i) that the industry has matured; (ii) the industry is not "hoarding" or "warehousing" spectrum; (iii) additional spectrum continues to be added; and together with (iv) the use of market-based spectrum auctions to assign the spectrum to the most efficient user, the issue of spectrum concentration, as the Department noted in its 2004 Notice rescinding the mobile spectrum cap, is no longer relevant. Based on the current evolution and competitiveness of the Canadian wireless market, spectrum caps should not be placed on the amount of spectrum that can be acquired by any single wireless service provider including its affiliates.

112. In this regard, and while noting its position regarding auction caps, we also note Rogers comment that:

Rather than implementing an auction specific cap, as recommended by Jeffrey Church the best economic policy is "*a combination of making more spectrum available and allowing unrestricted bidding on the more abundantly available spectrum.*"⁴⁴

113. The Consultation also inquired as to how the adoption of any of the proposed changes to Canada's foreign investment restrictions, as they apply to telecommunications, would impact parties' views expressed in their comments. Bell Mobility remains firmly of the view, as outlined in our Comments, that the Canadian wireless market is competitive and does not require any more interventionist measures. Bell Mobility noted that this is the case regardless of the potential changes to the foreign investment restrictions. Therefore, as stated in our Comments, the adoption of any of the proposed changes to the foreign investment restrictions would not impact our responses to the questions raised in the Consultation.

⁴³ Waverman, L. and K. Dasgupta, *Time to Set Aside Caps that Don't Fit: The Limits of Spectrum Policy in Canada*, February 2011, paragraph 117.

⁴⁴ Rogers, page 85.

11.0 NATIONAL PROVIDER VS. NEW ENTRANT SPECTRUM HOLDINGS

114. Some AWS new entrants take issue with the sub-1 GHz, particularly the 800 MHz cellular spectrum holdings of the national providers. A number of new entrants take the view that in light of national providers' sub-1 GHz spectrum holdings that the national providers do not therefore require 700 MHz spectrum. TELUS takes a similar blatantly self-serving position vis-à-vis the sub-1 GHz holdings of Bell Mobility and Rogers. The record of the proceeding does not support this view.

115. At the outset it should be noted that any spectrum awarded to national providers, or indeed any existing licensee, was done so pursuant to Industry Canada spectrum allocation policies in effect over the course of the industry's development. Further, the applicable allocation policies were determined by the Department, as is its normal practice, subsequent to extensive public consultation before the applicable allocation policies were struck. A number of comments also suggest that sub-1 GHz spectrum awarded to national providers came free of charge unlike the AWS spectrum which was awarded through auction. As the Department is aware, through their annual licence fee payments, the national providers have paid literally billions of dollars in spectrum fees to Government since the inception of the industry in the mid-1980's. It is also the fact that licence fees were paid even though, for the initial decades of the Canadian wireless industry the national providers operated at a loss, while further billions were invested in early infrastructure build-out.

116. Regarding the use of 800 MHz spectrum, as noted above, MTS Allstream, a qualifying AWS new entrant pursuant to the AWS auction rules, notes that:

In order to effectively and affordably deploy broadband services using wireless spectrum to rural users, additional low frequency spectrum is required. The 25 MHz of low frequency spectrum currently available to MTS Allstream in the cellular band is simply insufficient to bridge the wireless broadband gap for rural regions, given existing deployments and the specific challenges associated with rural deployment. This prime consideration should be a driving factor in the Department's review of the technical and policy framework for the 700 MHz spectrum band.⁴⁵

117. MTS Allstream's statement corroborates Bell Mobility's comment that it is currently using or plans to use its entire existing spectrum and does so in a spectrally efficient manner. Bell Mobility's Comments further noted that new technologies will coexist with current technologies

⁴⁵ MTS Allstream, page 2.

as an 'overlay' such that existing customers do not have to replace their devices and those that would like to upgrade their device can transition over to the new technology. Consequently, Bell Mobility noted, it would be years before 800 MHz spectrum was available for LTE deployment.

118. Rogers comments corroborate Bell Mobility's position when it stated that:

LTE technology and consumer devices will not be available for the 850 MHz band for many years to come. . . .In any event, since the 850 MHz band will continue to be used by Rogers to serve its millions of customers and roamers that use legacy technologies such as GSM and HSPA, the capacity required to implement reliable LTE services will not be available in Rogers' licensed 850 MHz spectrum. We believe that the major U.S. carriers are in precisely the same position and that this is why there will be no movement towards the manufacture of LTE devices for use in the 850 MHz band for several years.⁴⁶

119. As regards TELUS' comments concerning sub-1 GHz spectrum holdings, Bell Mobility would simply note that TELUS' spectrum holdings, are simply a reflection of its historical development within the Canadian industry. As TELUS notes above, a decade ago it emerged as a regional player on to the national scene as a viable competitor to both Bell Mobility and Rogers. Consequently, its 800 MHz holdings reflect its ILEC wireless affiliate legacy. It should not be forgotten however that this is offset by TELUS' subsequent acquisition of most of Clearnet Communications' 30 MHz of Tier 1 PCS spectrum in 2000. Bell Mobility, similarly, was a regional carrier before its acquisition of spectrum outside its traditional operating territory in the 2001 PCS auction.

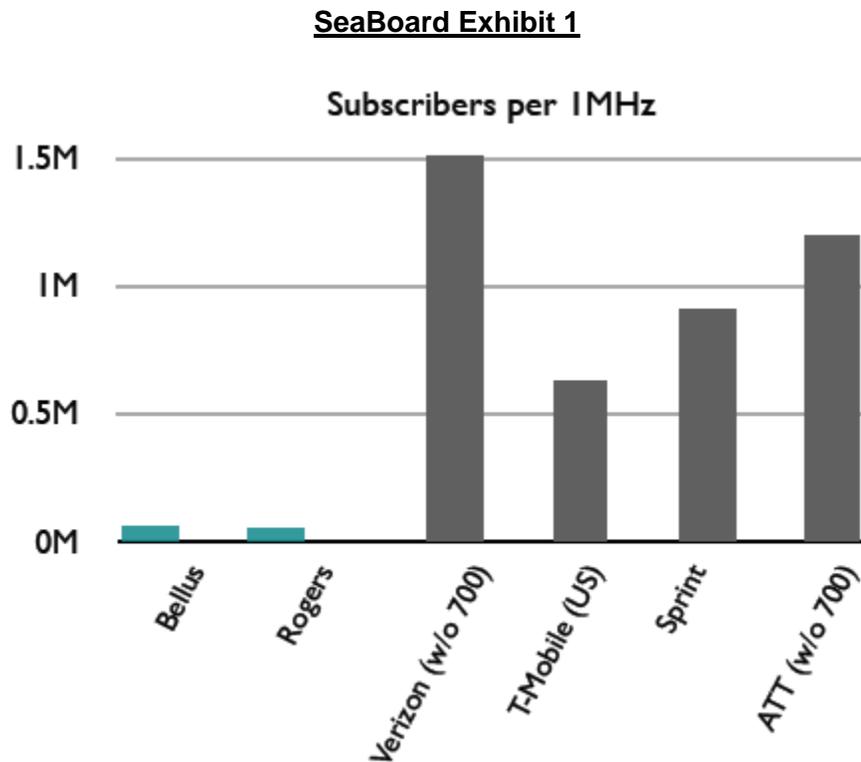
120. Bell Mobility also takes issue with TELUS comment regarding the Inukshuk partnership's spectrum holdings in the 2500 MHz band. In response to TELUS' comment that Inukshuk has "a head start advantage"⁴⁷ Bell Mobility would counter that TELUS could have taken the initiative and acquired 2500 MHz spectrum during the same commercial processes, i.e. the sale of Inukshuk and Look, as did Bell Mobility. TELUS did not and now it seeks Industry Canada involvement to offset its lack of initiative. Bell Mobility, to the contrary, does not believe that Industry Canada should penalize parties who show initiative, incur significant risk and invest millions in developing spectrum assets that were available to be acquired by any party. Bell Mobility also considers that TELUS is misleading when it includes 2500 MHz spectrum in its analysis, such as in Appendix 1 of its comments, to obfuscate TELUS' cost of spectrum

⁴⁶ Rogers, page 16.

⁴⁷ TELUS, page 61.

compared to Bell Mobility's cost. Bell Mobility notes that, in any event, TELUS will have an opportunity to acquire additional spectrum in the upcoming 2500 MHz auction.

121. A number of new entrants, referencing a February 2011 report by the SeaBoard Group, *Over the Rainbow: Thoughts on the Canadian 700 MHz Discussion*,⁴⁸ also suggest that the national providers are spectrum rich and do not therefore require 700 MHz spectrum. In this regard, some point to the spectrum holdings of various international carriers, including Verizon and AT&T in the United States, as in the figure below from SeaBoard's study, and suggest that the national providers hold more spectrum than do those carriers.



122. Bell Mobility notes that SeaBoard's methodology is extremely misleading and flawed. SeaBoard's methodology for determining the spectral efficiency of various operators is obtained by dividing the service provider's subscriber count by the average spectrum holdings in the markets it serves. Bell Mobility believes that, as a result, the exhibit above is extremely misleading since it doesn't take into account the fact that the U.S. market is 10 times larger than

⁴⁸ Seaboard Group, (SeaBoard) *Over the Rainbow: Thoughts on the Canadian 700 MHz Discussion*, February 2011.

the Canadian market. Further, the SeaBoard table is also misleading in that it portrays, for the purposes of its analysis, the entire populations as being located in one area. In fact, the population is spread over the entire country resulting in varying population densities from area-to-area. Bell Mobility submits that it would be more appropriate, and would produce a more meaningful comparison, if markets of a similar size, and population density, are compared as demonstrated in the Table 1 below.

Table 1

City	Population of Metropolitan area	Operator	Spectrum Holdings Cellular, PCS, AWS (MHz)	Approximate subscriber count	Subscriber/MHz
Toronto	5,113,149	Bell Mobility	75	1,300,000	17,333
Detroit	5,456,428	Verizon	65	1,650,000	25,384
Atlanta	4,112,198	Verizon	55	1,245,000	22,636

123. As Table 1 shows, since market sizes are similar, the subscriber/MHz metric for each city are more similar than what is implied in SeaBoard's Exhibit 1 above. The error Seaboard makes is when it compares markets of different sizes. For example, if the markets of Detroit and Atlanta are combined into a bigger market, the subscriber/MHz metric doubles as shown in Table 2 below:

Table 2

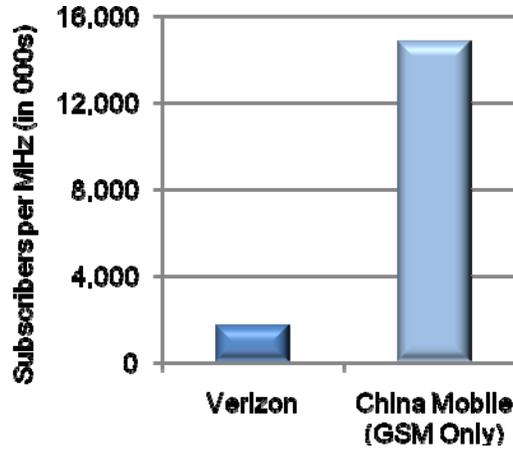
City	Population of Metropolitan area	Operator	Spectrum Holdings Cellular, PCS, AWS (MHz)	Approximate subscriber count	Subscriber/MHz
Toronto	5,113,149	Bell Mobility	75	1,300,000	17,333
Detroit	5,456,428	Verizon	65	1,650,000	25,384
Atlanta	4,112,198	Verizon	55	1,245,000	22,636
Detroit/Atlanta	9,568,626	Verizon	60	2,895,000	48,250

124. Since the U.S. market is 10 times larger than the Canadian market, the subscriber/MHz value for a U.S. carrier should be 10 times larger than a Canadian carrier. The metric as calculated by Seaboard is flawed, as further demonstrated below by comparing Verizon with China Mobile in Table 3 and Figure 2 below:

Table 3

Operator	Subscribers	Spectrum (MHz)	Subscribers/MHz
Verizon	94,100,000	57	1,650,000
China Mobile (GSM only)	578,200,000	39	14,825,000

Figure 2: Subscribers per MHz

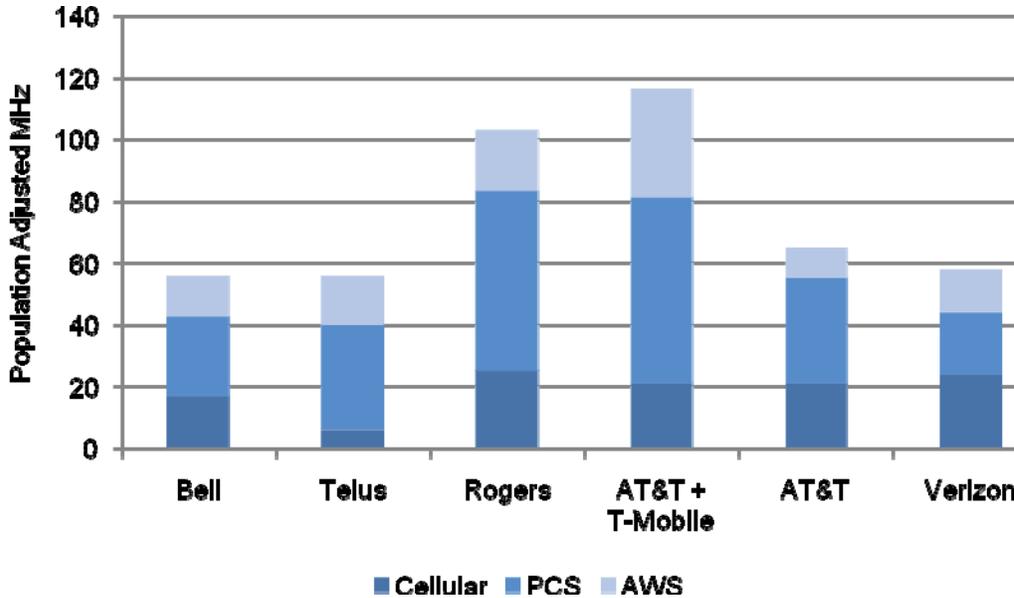


125. Therefore the only conclusion one can draw, using SeaBoard's calculation of the subscribers/MHz metric, is that it is a meaningless method of comparing spectral efficiency, between operators, when the underlying market sizes are so vastly different.

126. Specifically regarding spectrum inventories and whether the Canadian incumbents have a disproportionate amount of spectrum relative to their peers, as SeaBoard alleges⁴⁹, Figure 3 below shows that Bell Mobility's mobile frequency allocations are less than AT&T's, and is in fact on par with Verizon. However, given the demand for mobile services, mobile operators will need as much spectrum as possible in order to satisfy that demand. The recent announcement of the AT&T and T-Mobile merger will provide AT&T with enough spectrum to alleviate any short-term spectrum worries, and as Figure 3 shows, the new AT&T will have close to double the amount of spectrum as Bell Mobility.

⁴⁹ SeaBoard Group page 7.

Figure 3: Current Mobile Frequency Allocations (population adjusted)⁵⁰



127. Bell Mobility further notes in this regard, the Lemay-Yates report, *The Impact of 700 MHz Spectrum on LTE Deployment & Broadband in Canada*, February 2011, filed as an attachment to Rogers' comments. The report includes an assessment of international carrier's spectrum holdings excluding Digital Dividend and BRS related spectrum. As Rogers' notes:

As Lemay-Yates has found, large carriers in other countries hold anywhere from 66 to 130 MHz of mobile spectrum and Rogers' mobile spectrum holdings fall within this range.⁵¹

128. In this regard, Bell Mobility notes that at 75 MHz, according to the Lemay-Yates report, it clearly falls within the range.⁵²

129. The Lemay-Yates report is also useful in refuting the claim that national providers hold more spectrum, pre-700 MHz licensing, than did AT&T and Verizon prior to the licensing of 700 MHz in the U.S. As the Lemay-Yates report demonstrates, at 75 MHz Bell Mobility is below

⁵⁰ Based on Consultation Paper and the Federal Communications Commission *Annual Report and Analysis of Competitive Market Conditions With Respect to Mobile Wireless, Including Commercial Mobile Services Fourteenth Report*, page 148.

⁵¹ Rogers, page 24.

⁵² Lemay-Yates, *The Impact of 700 MHz Spectrum on LTE Deployment and Broadband in Canada*, 28 February 2011, page 44.

both AT&T at 95 MHz and Verizon at 85 MHz. The Lemay-Yates report further shows that the upper range of those carriers, post-U.S. - 700 MHz auction, is now 119 and 131 MHz respectively, both of which are well above Bell Mobility's 75 MHz.⁵³

130. Pointing again to the SeaBoard report, some new entrants suggest that the report further demonstrates that the national providers are not doing all that they can to squeeze efficiency out of their spectrum. The Seaboard report is incorrect in its analysis of six-sector antennae. In this regard, the report states that

In dense urban environments, many carriers in other jurisdictions use six-sector antennae, i.e. they re-use a given spectral block in six sectors.⁵⁴

131. Bell Mobility notes that it devotes significant resources to research and development, as well as participation in industry forums specifically to address matters of achieving maximum spectral efficiency. Further, our network operations teams continually tweak the network design both for maximum efficiency and utility, often by adding new cell sites. Consequently, if six-sector cell sites were the best technical solution for Bell Mobility, in our operating environment, we would certainly have implemented it. In fact, however, high gain antennas, such as are six-sector configurations, often serve to increase system self-interference and degrade service.

132. Consequently, the use of six-sector antennas by carriers is actually quite limited at this time. It is currently under study by some European operators as a means to support fixed broadband service in areas where populations are distributed throughout dispersed hamlets. In these situations, coverage with a certain acceptable signal/interference level is the primary concern and the economics are such that extra high gain antennas are their only option. Consequently, six-sectored cells are not used for capacity reasons, as is suggested by this report, but rather are used for coverage.

133. Further, in this regard, if one realistically examines the scale of the Exhibit 9 photographs, on page 15 of the Seaboard report, one can see that a relatively innocuous three-sector tower installation is replaced by a massive six-sectored antenna farm. One can imagine the public outcry if these were to be deployed in dense urban settings in Canada as suggested by this report.

⁵³ Lemay-Yates, page 44.

⁵⁴ SeaBoard, page 14.

134. Finally, in this regard, as Rogers observes:

. . . it should be noted that there is an important reason why incumbent operators possess more spectrum: they serve many more customers. Obviously, the more customers that an operator serves, the more traffic that must be carried on its network and the more spectrum capacity it will require to serve that traffic.⁵⁵

135. Rogers' comments, in this regard, demonstrate that when comparing the number of customers served per MHz of licensed spectrum, more valid in this case since the comparison is for the same underlying market, Rogers is shown to be a far more efficient user of spectrum than all of the new entrants. Rogers notes in this regard that it currently serves about 85,495 customers per MHz of mobile spectrum while new entrants only serve about 10,000 customers per MHz. Bell Mobility notes that, at 96,000 customers served per MHz of mobile spectrum, it is even more efficient.

136. Further, again corroborating Bell Mobility's position that the nature of the voice and text services provided by new entrants simply does not warrant additional spectrum, Rogers notes that:

Moreover, apart from the fact they hold more mobile spectrum than they require to serve their customers, the new entrants have mainly pursued basic voice centric business models since the time that they launched their respective service offerings. As explained in the attached Lemay-Yates Associates Inc. (Lemay-Yates) report, voice centric operators with low data take up and usage require significantly less spectrum than premium service operators such as Rogers that invest in and offer innovative mobile broadband services and have much higher data take up and usage. Lemay-Yates has estimated that voice centric operators can get by with as little as 5 to 10 MHz of spectrum while mobile broadband centric operators will require up to 200 MHz of additional spectrum, and much more if LTE technology does not deliver its expected spectral efficiency.⁵⁶

137. It is also important to note that there have been numerous occasions, including several outside of Industry Canada's licensing processes, to purchase mobile spectrum in Canada. Looking at the list of applicants for PCS spectrum in 1995, for example, nowhere do names like Shaw or Vidéotron appear. The same holds true for the list of those who bid for spectrum in Industry Canada's 2001 PCS Auction.

⁵⁵ Rogers, page 23.

⁵⁶ Rogers, page 23.

138. That does not mean some of these players have not had an interest in wireless. In fact, when new PCS provider Microcell launched an initial public offering in 1997, Shaw and Vidéotron were both listed as owning about 10% of Microcell. What is striking is that before and after the IPO, they could have grown their stake, but chose not to. In fact, not long after the IPO, Shaw sold its shares in 1998 for an after-tax profit of around \$11 million. Media reports said that the wireless investment was sold because it was not "core" to their future business. This contrasts significantly with the earlier action of another cable company, Rogers Cable who, in the 1980s, chose to take the risk of entering the nascent wireless market.

139. A similar story holds true for Vidéotron. In 2001, they declared their wireless investment "noncore" and attempted to sell their stake for a reported \$1 billion. Interestingly, they found that no one would buy at that price and eventually they declared a \$99 million write-down on the investment in 2002.

140. For the existing carriers, however, history is quite different. TELUS bought Clearnet for \$6.6 billion in October of 2000 in what, at the time, was a "bet the company" transaction. Indeed, TELUS saw its share price pay dearly for the risk.

141. In 2001, Bell Mobility was participating in Industry Canada's PCS Auction and demonstrated its willingness to take a substantial risk by bidding \$720 million. The spectrum acquired enabled Bell Mobility to enter Western Canada as a facilities-based competitor and within a year to build a 3G network without mandated tower sharing or any other form of Government subsidy or regulatory assistance. In 2006, Bell Mobility further cemented its place as a national wireless carrier through its acquisition of Aliant Mobility.

142. Similarly, Rogers and TELUS both sought to acquire Microcell in 2004. Rogers won, buying the company for \$1.4 billion. Again, there was no interest shown by Shaw, Cogeco and Quebecor or even MTS. They were making other strategic choices. That same year, MTS bought Allstream for \$1.7 billion despite the fact that a GSM wireless network, with a 30 MHz national PCS licence, was available for less. These same companies passed on the opportunity to acquire Microcell when it was experiencing financial difficulty and could have been acquired for a price in the \$400 - \$500 million range.

143. The same holds true for BRS spectrum allocations. Others had ample opportunity to enter the court-appointed bidding process for Look Communications' spectrum and broadcast licenses in 2009, and to have made offers for Craig Wireless Systems Ltd. in 2010.

144. To be clear, Bell Mobility is not criticizing the strategic choices made by these companies to pursue opportunities elsewhere. Many of their choices seemed to have been profitable choices for them. The key point is that these companies have had repeated opportunity and the financial ability to enter the wireless market in the past. Instead these companies choose not to take the opportunity. Bell Mobility does not believe, therefore, that it is appropriate to punish the companies, such as Bell Mobility, who incurred the risk and entered the wireless business in the early days and sustained years of losses.

145. The Department's Consultation asked whether in light of the current conditions in the Canadian wireless service market there is a need or specific measures in the 700 MHz and/or 2500 MHz auction to increase or sustain competition.

146. Bell Mobility remains strongly of the view that an unrestrained auction is a highly efficient, market-based approach for spectrum management. Auctions tend to assign spectrum to those best able to use it. License applicants that are best able to put the spectrum to use are likely to be the ones that bid the highest. Auctions are also a transparent means of assigning licenses since all parties can see who won the auction and why.

147. As noted in Bell Mobility's Comments in consideration of the present circumstances, there is absolutely no need or rational basis for any artificial regulatory measures intended to increase or sustain competition in either the 700 MHz or the 2500 MHz spectrum auctions. As demonstrated throughout those Comments, the circumstances existing in the Canadian wireless market simply do not warrant the interventionist measures raised for consideration in this Consultation. There is no evidence of the failure of competitive market forces that would justify continued Government intervention. To the contrary, the available evidence, including the record of this Consultation, suggests that the Canadian wireless industry is a competitively functioning market that does not require fixing.

148. Finally, in this regard, as Bell Mobility noted in its Comments, when Industry Canada developed its AWS auction policy, its intention was to introduce further competition into the Canadian wireless market, and not to permanently disadvantage one of the national carriers. Given the very limited amount of 700 MHz spectrum available, a set-aside in the 700 MHz auction will permanently disadvantage at least one of the three national carriers. This surely cannot be the cornerstone of Canadian spectrum policy.

12.0 PROMOTING SERVICE DEPLOYMENT IN RURAL AREAS

149. The Consultation also sought views as to whether there was a need for measures, within the 700 MHz auction framework, to ensure the deployment of broadband mobile services to low-density rural and remote areas.

150. Bell Mobility supports the view of Rogers⁵⁷ and TELUS⁵⁸ that roll-out requirements will ensure that successful 700 MHz bidders deploy the spectrum to all areas of Canada including low-density rural and remote areas as well as the larger urban centres. TELUS notes, in this regard, that:

In order to ensure the expansion of rural mobile broadband services, TELUS proposes that all 700 MHz spectrum be subject, not only to open bidding, but also to a build out requirement stipulating that service be provided to 50% of the population in each Tier 3 service area within three years of licence issue. Should the build out requirement not be fulfilled, the licence would be automatically forfeited by its owner. This stringent build condition would apply irrespective of whether the [actual] licence is a Tier 1, 2 or 3 licence and the test would be applied at the level of the underlying Tier 3 service areas (in each Tier 1 or 2 licence as well) in order to avoid carriers meeting the 50% requirement simply by building out large urban centres where most of Canada's population resides.⁵⁹

151. TELUS further clarifies its proposal noting that a licensee would lose, for example, their entire Tier 2 service area licence if they did not serve within 3 years, 50% of the population in each of the Tier 3 service areas that make up their Tier 2 licence.

152. Bell Mobility supports TELUS' proposal to apply roll-out requirements on a Tier 3 basis to the 700 MHz licences. While Bell Mobility fully intends to employ 700 MHz spectrum throughout its network, i.e. in urban as well as rural and remote areas, applying the roll-out requirement on a Tier 3 basis would ensure that all licence winners build-out to rural and remote Canada as well the urban centres.

⁵⁷ Rogers, page 5.

⁵⁸ TELUS, page 4.

⁵⁹ TELUS, page 4.

13.0 OPEN ACCESS

153. The Consultation also sought comments on whether there is a need for Government intervention to promote open access, by increasing access by users to handsets and/or applications.

154. Bell Mobility noted in this regard that in light of the fast paced evolution of the wireless market regarding open device and application platforms, Government intervention is not required to stimulate open access. Open access already exists in the North American wireless market and it has occurred as a result of technological developments and market forces. Indeed it is already evident and is widely accepted in Canada in the form of the Android operating system.

155. Bell Mobility found considerable support for this view among the parties who addressed the issue. In short, the overwhelming view of most parties in response to the department's question is characterized by Quebecor's statement that:

In QMI's opinion, the FCC's open access rules, while arguably relevant at the time they were adopted in July 2007, have since been overtaken by marketplace events.⁶⁰

14.0 AUCTION TIMING

156. The Consultation outlined three options to proceed with the 700 MHz and 2500 MHz bands auction processes and sought parties' views on those options. Bell Mobility notes that various respondents' comments offered support for each of the proposals outlined.

157. In its Comments Bell Mobility supported conducting an auction for licences in the 700 MHz band first, followed by an auction for licences in the 2500 MHz band approximately one year later. We note however that a number of parties recommended holding a joint-auction for the 700 MHz and 2500 MHz spectrum. Quebecor, for example, noted in this regard that:

. . . we reiterate our recommendation that a single auction be held to award spectrum in both the 700 MHz and the 2.5 GHz bands. This would provide all mobile carriers with the ability to assess their spectrum holdings in an integrated

⁶⁰ Quebecor, page 25.

and strategic manner and would yield a higher level of certainty which in turn is a key element to stimulate long term investment.⁶¹

158. Bell Mobility supports the view of Quebecor and other parties who propose holding a joint-auction for the 700 MHz and 2.5 GHz spectrum. Unlike Rogers, which proposes that the auction be held in mid-2013, Bell Mobility proposes that Industry Canada should continue to target the start of the auction in the late 2012 timeframe so that deployment of the spectrum can start in 2013.

*** End of Document ***

⁶¹ Quebecor, page 27.