



Monday, February 28, 2011

Adrian Florea
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Industry Canada
Mobile Services Engineering Directorate
300 Slater Street
Ottawa, Ontario K1A 0C8
Canada

Re: Comments – Canada Gazette Notice SMSE-018-10, “Consultation on a Policy and Technical Framework for the 700 MHz Band and Aspects Related to Commercial Mobile Spectrum”

Dear Mr. Florea;

Niagara Networks is pleased to provide comments on Canada Gazette Notice SMSE-018-10 dated December 4, 2010. We appreciate this opportunity to respond on this very important policy issue.

Attached are the comments of Niagara Networks in regard to the above noted consultation document. Should you wish to discuss these comments, please do not hesitate to contact us.

Sincerely,

Douglas Evashkow
CEO,
Niagara Networks Incorporated
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Executive Summary

Niagara Networks is pleased with the announcement of additional spectrum assets being made available to industry at this time. Demand for mobile bandwidth is increasing dramatically as can be demonstrated. We agree the market requires additional spectrum in order to adequately meet this demand. Licensing of additional spectrum at this time is therefore in the best interest of Canadians.

Since 1984, the Department has continually demonstrated wisdom, foresight and leadership that ensure Canadians have access to state of the art products, services and highly advanced wireless networks. In 1984 specifically, the Department provided two licensees with virtually free spectrum assets. This was done in order to overcome the challenges presented by a large geography with relatively low population density. The incentive was to entice building of their national networks. Licensees responded providing near total coverage of the population. Both licensees and the Department are applauded.

In 1995, the Department again demonstrated foresight and leadership selecting two new entrants to participate as competitors in the market. The decision evoked rapid deployment of advanced PCS network infrastructure, improved services, more choice and affordable pricing for consumers which lasted until 2001. Market consolidation removed one of those new entrants and the other



was forced into bankruptcy. ARPU systematically began to rise while new product and service offerings were all but stifled.

In 2007, the Department again demonstrated foresight and leadership by introducing a spectrum set aside to promote more competition. We note, the incentive of the set aside spectrum to encourage new entrant participation in 2007 is similar to the incentive offered licensees to build a national infrastructure. In keeping things fair, we note that new entrants in 2008 had to pay considerably more for their spectrum assets. As a result, three national carriers (“the Big 3”) and a number of new entrant competitors make up the current market. Indications are that competition is slowly returning and ARPU is finally stopped increasing. We applaud the Department for its efforts in promoting more competition. We caution however, it is critical that more needs to be done at this time in order to ensure the competition being created can be sustained.

In the 2003 AWS consultation, the Big 3 indicated they were content with the spectrum they had. Since then, Rogers virtually doubled its spectrum holdings and comments by TELUS in 2007 indicated they were content with their spectrum holdings prior to the 2008 auction. We note the Big 3 all purchased more spectrum assets in the 2008 auction. The key question is why?

Spectrum is the raw material that determines how, where and to what extent anyone can compete in the market. Currently, the Big 3 control 85% of all

available spectrum assets. There should be little wonder they remain as dominant as they are in the market and they still control pricing. The question now becomes for how long will they be allowed to dictate pricing? Maintaining or worse increasing the Big 3's spectrum assets relative to the rest of the market would not be in the best interests of the consumer. Further, that scenario would not foster or advance competition nor is it likely to deliver new products and services any time soon. Bell and TELUS just built their new network. Do they need more spectrum assets to build another network? Increasing the amount of spectrum "set aside" for new entrants relative to the Big 3 in this and perhaps future spectrum auctions, would foster and ensure long term sustainability of market competition. New products and services will arrive much faster.

The Department has indicated that it may take measures with respect to foreign investment in the Telecommunications sector. In order to promote competition in the market, new entrants need further insulation from the Big 3's market dominance. We note, providing this support is no different than what the Big 3 were afforded in terms of being insulated from competition in the past. That insulation allowed them to amass the dominant spectrum assets, infrastructure and market share positions they currently enjoy. Relaxing foreign investment criteria for new entrants could accelerate the market's overall competitiveness while ensuring long term sustainability of that competition. We applaud the Department for its efforts and strongly urge you to continue supporting competition by offering more incentives to new entrants.

Comments

Section 4 Commercial Mobile Services

4.2 Stakeholder Holdings, Demand and Business Considerations

Q 4.1 “What is the general need for additional commercial mobile spectrum at this time and what do you anticipate the future needs to be?”

4.1 We submit that there is an immediate need for additional commercial mobile spectrum at this time. In this consultation document the Department has graphically depicted the extent to which the current spectrum assets available to industry competitors are unevenly distributed as illustrated in Figure 1, below;

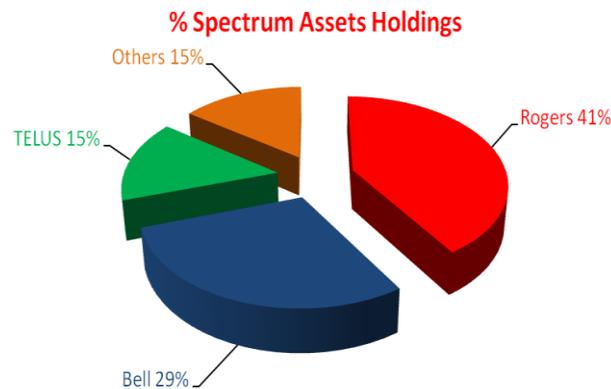


Figure 1 Existing Spectrum Asset Division Amongst Industry Competitors.

The Department also graphically depicts what the impact of the upcoming auction(s) could mean in terms of mitigating the disparity in spectrum assets division between industry competitors as illustrated in Figure 2.

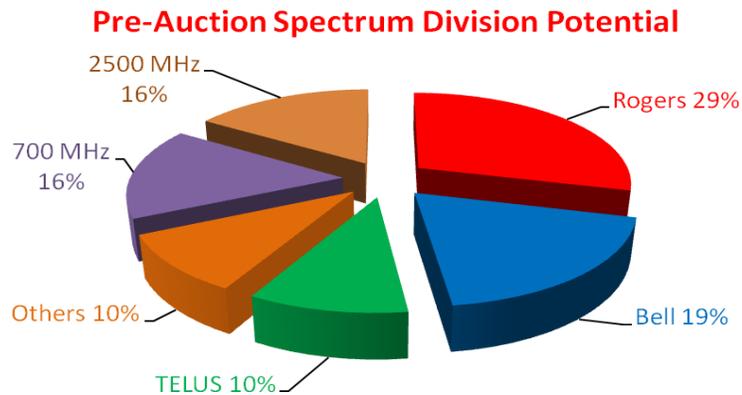


Figure 2 Potential Impact of Additional Spectrum on Industry Competition

4.2 In Figure 1, above, the Department provides a graphic depiction of just how unevenly spectrum assets are divided amongst industry competitors. From these spectrum assets the basis of competition in the market is established. All aspects of competition from markets served to infrastructure, products and services, anti-competitive practices etc. are all derived from this single resource. The raw material then needed by industry competitors is spectrum resources. The more this raw material is distributed, the more aggressive the competition in that market can become. Also, the stronger each competitor becomes the more sustainable competition is over the long run. How much and where these spectrum assets are distributed determines the extent to which any competitor can compete. For example, if they wanted to, the Big 3 could focus offerings at any current competitor with anti-competitive intent. For instance, they might introduce a flanker brand and offer certain low cost services in one location while not offering the same discount anywhere else.

It is a fact that much of the spectrum assets held by the Big 3 was provided to them virtually for free in order to promote investment in the formative years. We note that Bell and Rogers in particular were gifted with an opportunity and built the basis for a national network infrastructure. Bell and Rogers are applauded for their effort. The Department is applauded for having the foresight to entice that investment alongside the generous government support offered to build that infrastructure.

Success in terms of product and service adoption in the mobile industry is a global event. One cannot however conclude that success in the Canadian market was driven by the Big 3. In fact, the story is quite the opposite. Due to the collusion and subsequent anti-competitive market practices employed by the Big 3 from 2001, the Canadian market rapidly fell behind other countries. The rational pricing practices employed by the Big 3 were an abuse of these spectrum assets trusted to them. As a result, prices increased to one of the highest levels in the world. Further, the Big 3 are beneficiaries of a market that has been relatively insulated from competition for many reasons none the least of which was the availability of spectrum assets. Everyone has benefited from the development of a national infrastructure. At one time, development of such infrastructure presented a major barrier to market entry. However, the high prices we continue paying for services is not the reward we expect as consumers for gifting these competitors. The core infrastructure needs to be shared and even that request meets with strong resistance. New entrant competitors deserve the same spectrum asset opportunity afforded to the Big 3 in order to promote healthy competition and put an end to anti-competitive practices in the market. Insulating new market competition from the Big 3 is no different than what was provided to them the past.

4.3 As illustrated in Figure 2, the auctioning of spectrum assets in the 700 MHz and/ or 2500 MHz bands represents a real opportunity to foster even more aggressive competition in the market. In providing new entrants with greater

access to the available spectrum assets the pace towards sustainable competition will be accelerated. Placing more spectrum in the hands of new market competition will begin to close the spectrum asset disparity between market competitors. That will translate into delivering new products and services more immediately while forcing network, product and service upgrades amongst all competitors.

4.4 On February 1, 2011, Cisco provided their Visual Networking Index: Global Mobile Data Traffic Forecast Update, 2010–2015. In that report they cite statistics and expectations for mobile data traffic growth. In particular, from the Executive Summary they note;

The Mobile Network in 2010 and 2011

- Global mobile traffic grew 2.6-fold in 2010, nearly tripling for the third year in a row.
- Last year's mobile data traffic was three times the size of the entire global Internet in 2000.
- Mobile video traffic will exceed 50 percent for the first time in 2011. Mobile network connection speeds doubled in 2010.
- Average Smartphone usage doubled in 2010.
- Smartphone's represent only 13 percent of total global handsets in use today, but they represent over 78 percent of total global handset traffic. Globally, 31 percent of Smartphone traffic was offloaded onto the fixed network through dual-mode or femtocell in 2010
- In 2010, 3 million tablets were connected to the mobile network, and each tablet generated 5 times more traffic than the average Smartphone.
- There were 94 million laptops on the mobile network in 2010, and each laptop generated 22 times more traffic than the average Smartphone
- Nonsmartphone usage increased 2.2-fold to 3.3 MB per month in 2010, compared to 1.5 MB per month in 2009.

The Mobile Network in 2015

- Global mobile data traffic will increase 26-fold between 2010 and 2015. (Mobile data traffic will grow at a compound annual growth rate (CAGR) of 92 percent from 2010 to 2015.)
- There will be nearly one mobile device *per capita* by 2015. (~ 7.2 billion)
- Mobile network connection speeds will increase 10-fold by 2015. (The average mobile network connection speed (215 kbps in 2010) will grow at a compound annual growth rate of 60 percent.)
- Mobile-connected tablets will generate as much traffic in 2015 as the entire global mobile network in 2010.

- The average Smartphone will generate 1.3 GB of traffic per month in 2015, (a 16-fold increase over 2010 and aggregate Smartphone traffic in 2015 will be 47 times greater than it is today, with a CAGR of 116 percent.)
- There will be 788 million mobile-only Internet users by 2015. (The mobile-only Internet population will grow 56-fold from 14 million at the end of 2010 to 788 million by the end of 2015.)

4.5 Summarizing; there is a need to foster the fragile competition now entering the Canadian market. The Department should provide more spectrum assets in order to accelerate the pace of the current trend towards a sustainable competitive market. Spectrum auctions are one of the few times when the Department can assist and foster more competition. In providing additional spectrum at this time, the Department can take advantage of an opportunity to close the gap between industry competitors in terms of more equal distribution of available spectrum resources.

As the Cisco statistics and forecast imply, demand for mobile bandwidth and thereby available mobile spectrum is expected to grow at unprecedented rates over the next 5 years. By the time the 700 MHz and/ or 2500 MHz bands are auctioned, spectrum is cleared and networks rolled out, we will be fast approaching the 2015 time frame described in that forecast. The Department should provide additional spectrum to the industry as soon as feasibly possible.

Section 5. 700 MHz Band Plan Issues and Considerations

Q 5-1. “Based on the criteria listed above, which of the four band plan options should be adopted in Canada? Why is this option preferred over the other options? If Option 3 (APT band plan) is selected, what should the block sizes be? In providing your responses, include supporting arguments, including potential benefits to wireless subscribers.”

5.1, Based on various factors, the Department should consider Option 3, the “APT band plan”, as the best option. These are sizeable markets that will be utilizing this format relative to the United States market. Economies of scale benefit the business model and increased competition would be forced to pass that along to the consumer. Canada would also diversify in terms of its international alignment. The winner would be the consumer. The cost of network and handsets should be much better and a more global user experience would be available. The Department should consider auctioning 5 blocks of 5+5 MHz and 2 blocks of 10+10 MHz plus the guardband.

5.2, Canada is a diverse multicultural population and subscribers needs increasingly differ from our neighbour south of our border. Furthermore, there are numerous frequency bands that are already aligned with the United States. The majority of 700 MHz spectrum in the United States is currently split between two

major carriers. Both carriers have signalled an LTE deployment. There are no guarantees however that enough equipment would be produced over the next few years to produce the same economies of scale as the APT band will obviously provide.

5.3, If the Department decides that aligning the bandplan with the United States is in our best interests, then “Option 2b” should be considered the best option. In order to foster competition and provide new entrant competitors with valuable spectrum assets, the spectrum assets as described in Option 2b should provide sufficient flexibility to suit competitors varying needs. This option would also promote more post auction activity and foster co-operation amongst industry competitors. We are in agreement with the block sizes as suggested by the Department in Option 2b.

Q 5-2. *“The band plans presented in the options above include guardbands. Should the Department auction the guardbands, or should these frequencies be held in reserve for future use such that they are technically compatible with services in the adjacent bands?”*

5.4, We are of the opinion that the guardbands should be auctioned. We anticipate that would promote placing more spectrum assets in the hands of new market competition while reducing the disparity in spectrum assets amongst industry competitors. Furthermore, the market will find a way to implement this spectrum efficiently.

5.2 Options for use of 758-768 MHz Paired with 788-798 MHz for Public Safety and/or Commercial Systems

Q 5-6. *“Notwithstanding your responses to questions 5-3 to 5-5, the Department seeks comments on whether public safety broadband needs can be met by using commercial systems with priority access rights for public safety, at commercial rates.”*

5.5, The cost of building a national public safety network is likely prohibitive. Furthermore, with all the public departments listed in this consultation document that would require access to the system, it would take a long time to organize a system that meets all of their requirements. If built in pieces, they will not get the most cost effective system in the end. Such an endeavour needs the co-operation of private sources to share costs and finance infrastructure. They will need help to design the system, procure equipment and build the network to meet everyone’s needs. All of this has to be done as cost effectively as possible. There is ongoing maintenance, recurring site rental and eventual upgrades to the network which make building this network even more questionable in terms of being feasible. The cost burden eventually gets passed onto Canadians in the form of additional taxation. We question if building such a network as opposed to purchasing commercial services would be in the best interests of all Canadians. There should be little to no reason why public safety requirements could not find a way to meet their needs using a commercial system at commercial rates.

Major centers might argue they can afford to build a regional network and insist they require the spectrum. Even if they can afford to build their network, it is more than likely that a great deal of the spectrum in rural, corridor and other regions might tend to lay fallow. That does not benefit the consumer if the spectrum resource could otherwise have been put to better use in a commercial venture on a national scale. Putting this spectrum to use commercially in such a way that it fosters competition in the market will benefit the consumer, public safety and taxpayers.

(a) *"Your views and comments are invited on priority access rights, including pre-emption, and on the feasibility of such a system."*

5.6, If the system is to be utilized in a real emergency and not used by public safety for other than emergencies, it should not require a great deal of priority access. Even in Toronto, emergencies that would actually require priority should not be required to bring down the entire system citywide. The public safety system should follow a set of guidelines that define under what circumstances and the types of data that can access the system with priority rights. All other use of the system should sit in the queue along with commercial subscribers. Under these conditions, priority access should not be a problem for any commercial agreement.

In the United States, a number of business models considered working with public safety authorities in connection with the infamous block D. In the end, none of the bids met the reserve price and the block will be auctioned again. At this point it is unclear what will happen with block D. Even so, there is no reason why Canadian public safety cannot work out a commercial arrangement to provide adequate services at a reasonable cost to the taxpayer. Any such arrangement could be made to match the eventual outcome in the United States on a commercial platform.

Q 5-9. *"If band plan Option 1, 2a, or 2b in Section 5.1 is chosen, which one of the three options described above should be adopted and why is this option referred over the other options? Provide supporting rationale."*

5.7, If the Department decides to align 700 MHz spectrum to some degree with the United States band plan, then Option 2 (10 + 10 MHz commercial) should be considered as the most cost effective means of providing service for public safety. From a taxation perspective, this would be in the best interests of all Canadians. If public safety use of the network is confined to real emergency conditions, the cost of leasing space on a commercially viable network would be the optimum and most cost effective choice for all concerned.

Q 5-10. *“If commercial operators are mandated to support public safety services, what tier size should be applied in order to ensure adequate public safety coverage?”*

5.8, The public safety network should be established uniformly on a national basis in order to take advantage of economies of scale and reduce overall cost. If the commercial operator is mandated to reduce service capability during an emergency, the inconvenience of such should be offset by a reasonable advantage in order to keep the block attractive for investment. That being said, offering a Tier 1 license should provide sufficient incentive to make the license attractive. A Tier 1 licensing would provide business advantages to the commercial entity holding the license and thereby make it easier to acquire adequate financing.

Q 5-11. *“If the APT band plan (See Option 3 in Section 5.1) is adopted:”*

(b) *“Should spectrum be designated for dedicated public safety broadband systems, and how much?”*

5.9, In the case that the Department chooses to implement the APT band plan, provision can be mandated via commercial arrangement to align service access with the United States. The Department could align the blocks to be auctioned with the anticipated block to be used by public safety having additional favourable terms such as a Tier1 licensing and conditions attached surrounding the use of priority access.

5.3 Tier Sizes for 700 MHz Auction of Commercial Spectrum

Q 5-12. *“The Department seeks comments on whether the auction of 700 MHz commercial spectrum should be based on uniform tier sizes across all spectrum blocks, or a mixture of tier sizes.”*

5.10, If the Department decides to promote more competition in the auction, a wide range of business plans will be considered. Currently, the market competition is fragile and competitors all have differing needs. As with the successful auctioning of AWS spectrum, a mixture of tier sizes should be considered and made available to suit all competitors’ potential business models. The Department needs to provide the greatest latitude for bidding on spectrum blocks. The additional flexibility will assist more rapid deployment of new network infrastructure, lower cost of deployment, more choice for products and services, and better pricing.

Q 5-13. *“Based on your answer above, what tier size(s) should be adopted?”*

5.11, The Department should consider the use of Tier 1 in conjunction with public safety issues as discussed above. Tier 2 would minimize coordination costs for some competitors and Tier 3 would satisfy some new entrants who wish to build

locally/ regionally and/ or backfill in certain regions cost effectively. Tier 3 may also assist with rural deployment.

7. Promoting Competition

7.1 Possible Need to Promote Competition

Q 7-1. *“The Department seeks comments on the current state of competition and its anticipated evolution, including the impact on consumers in the Canadian wireless services market:”*

(a) “in general;”

7.1, Competition in the Canadian market is slowly taking shape. This competition is fledgling, needing time and the Departments continued support to take root and fully mature. In 2008 the Big 3 competitors had all launched new flanker brands pre-emptively aimed at new entrant competition. Not surprisingly, nearly one third of new subscribers purchased services from a new entrant competitor in late 2010 which was shortly after their launch. Consumers finally have more choice and the pent up displeasure with the Big 3’s offerings flanker brand or otherwise is being vented where choice is being offered. ARPU in general still remains high and has only come down slightly.

The Big 3 maintain a dominant grip on the market. Barriers to entry have been reduced slightly due to efforts by the Department. However, if the Big 3 can maintain their grip on the market and the Departments support is insufficient, we will likely be headed towards another round of consolidation. The Big 3 are not going to give up their dominance of the market easily. The Big 3 hold the majority of key assets and are entrenched. Their dominance is forged over years of being insulated from competition. The Department needs to incentivize new competitors and quell investment fear by demonstrating they are committed to supporting competition. Then we will have a truly competitive market.

To promote sustainable competition it is critical at this point for the Department to reduce the disparity between industry competitors in terms of market share and assets. The Department can achieve that goal via a spectrum auction by offering more of the available spectrum assets to new entrant competition as incentive to invest and build.

(c) “in comparison with the wireless markets of other jurisdictions.”

7.2, In 2007, the Canadian market had 12 main brands. 10 of these brands were controlled by the Big 3 competitors. Today, the market has 19 main brands, 14 of which are still controlled by the Big 3 competitors. That’s an improvement over 2007 but is it really an indication of aggressive competition or just an enhanced choice of flavours providing no net benefit to the consumer?

Compare that to the United States which has 31 main brands of which only 17 are controlled by the Big 5. Clearly, almost half the main brands in the United States are smaller competitors and their market sustains the competition. Even though consolidation has taken place in the United States market, competition is still flourishing. Across Europe, the Middle East and Asia, there are 100's of brands not controlled by just a few competitors. ARPU is much lower as credited to more aggressive competition in other markets.

Q 7-2. *“Provide views, and any supporting evidence, on the impacts of government measures adopted in the AWS auctions, including the impacts on consumers and on the state of competition. In particular, what has been the impact, if any, of such measures on industry concentration, barriers to entry or expansion of services, and the availability of new or improved service offerings and pricing plans?”*

7.3, Prior to the 2007 decision to introduce more competition into the market, the Big 3 competitors were claiming the Canadian market was very competitive as it is. All of these competitors claimed in one way or another that the Canadian market could not support or sustain any more competition. In fact, prior to the AWS auction, TELUS went as far as suggesting that the opportunity for more competition in the market was well behind us. TELUS said they joined when there was 12% penetration and at over 60%; the opportunity to enter and successfully compete was over.

The truth is that prior to the AWS auction there was no real competition in the market. Simply stated, the Big 3 did not want to split the revenue pie any more than necessary and it appears, nor did they want to compete. Their rationale combined with their continued ability to dictate pricing is at the expense of the consumer. In reality, the market can sustain much more competition. Real competition drives down ARPU and the huge profits the Big 3 have been counting on while relatively insulated from competition. All of the Big 3 at one time was either an ILEC or cable operator. As such, they have never had to compete or innovate. The market is on its way to producing \$35 to \$40 billion per year within ten years. That size of market can sustain much more competition than what exists today.

Bell and TELUS have finally launched a new network increasing the products and services available to consumers. Without competition introduced in the AWS auction to drive them, when will this network next be upgraded? In general, more choice is available to consumers. How long that lasts will be up to the Department and the strength of support offered to new entrants. For the first time in close to a decade, real competition appears to have arrived in the Canadian market.

Barriers to market entry have been reduced as a result of almost 15% of the total available spectrum being made available to new entrant competitors in the AWS auction. However, there remains a large chasm in terms of division of spectrum assets between market competitors. Actions taken in the AWS auction should be



considered only a start. The impact of the AWS decision on market competitiveness remains slight at the moment with the full impact yet to be known.

Improvement in pricing plans and service offerings exist but it has been slow in coming due to the delayed pace of network and service rollout by new entrants for various reasons. The improvement however is only focused on certain segments of the market. In terms of concentration, the Big 3 remains very much in control of the market and have managed to maintain ARPU that is relatively unchanged on their main service offerings.

In Figure 3, below, an RBC Capital Markets estimate provides some data highlighting the impact new entrant competition is having on the market. Keeping in mind new entrants really emerged by mid 2010, the impact is put in perspective via the estimate.

Exhibit 2: Incumbent Q4/10E Wireless Summary

	Q4/09A	Q4/10E	Yr/Yr % Chg		Q4/09A	Q4/10E	Yr/Yr % Chg
Total Wireless Net Adds (000's)				Wireless Gross Adds (000's)			
Bell	163	148	-9.3%	Bell	524	557	6.3%
Rogers	128	140	9.4%	Rogers	480	542	12.8%
TELUS	122	117	-4.1%	TELUS	431	452	4.9%
Big 3 Total	413	405	-2.0%	1435	1551	8.1%	
MTS/Sask/BA	23	9	-60.20%	Wireless Postpaid Net Adds (000's)			
Total Incumbent	436	414	-5.10%	Bell	110	98	-10.8%
Videotron	3	40	nmf	Rogers	109	90	-17.4%
WIND	11	85	nmf	TELUS	109	103	-5.7%
Mobilicity	0	60	nmf	328	291	-11.3%	
Public	0	25	nmf	ARPU (blended)			
Total New Entrant	14	210	nmf	Bell	\$ 51.08	\$ 52.39	2.6%
Grand Total	450	624	38.80%	Rogers	\$ 63.23	\$ 61.90	-2.1%
New Entrant Share	3%	34%		TELUS	\$ 57.38	\$ 57.09	-0.5%
				ARPU (postpaid)			
Total Wireless Subscribers (000's)				Bell	\$ 62.47	\$ 63.41	1.5%
Bell	6,833	7,273	6.4%	Rogers	\$ 73.42	\$ 71.58	-2.5%
Rogers	8,494	9,021	6.2%	TELUS	n/a	n/a	
TELUS	6,524	6,969	6.8%	Churn (blended)			
Big 3 Total	21,851	23,263	6.5%	Bell	1.80%	1.92%	12 bps
MTS/Sask/BA	1,012	1,055	4.20%	Rogers	1.39%	1.50%	10 bps
Total Incumbent	22,863	24,318	6.4%	TELUS	1.62%	1.62%	0 bps
Videotron	83	135		EBITDA (\$MM)			
WIND	11	225		Bell	\$ 435	\$ 446	2.5%
Mobilicity	0	94		Rogers	\$ 744	\$ 732	-1.6%
Public	0	59		TELUS	\$ 435	\$ 469	7.8%
Total New Entrant	94	513	448.70%	EBITDA % of Net. Rev			
Grand Total	22,957	24,831	8.20%	Bell	41.2%	38.7%	-258 bps
New Entrant Share	0%	2%		Rogers	46.6%	44.1%	-251 bps
				TELUS	39.4%	39.6%	17 bps

Source: Company reports, RBC Capital Markets estimates

Figure 3 RBC Market Estimates

While all of the Big 3 reported increases in ‘Wireless Gross Adds’, ‘Net Adds’ is more telling in that it is down for at least two of them. All of the Big 3 reports a decline in pre-paid service offerings. The difference between Gross & Net Adds makes sense as after factoring in Churn, this is where most of the new competition has focused. The report shows that roughly one third of all new Net Adds for the final quarter of 2010 was acquired by new entrants. All of the Big 3 reported slight increases in Churn and the report estimates that new entrants have captured roughly 2% of the market. The report clearly indicates that the result of efforts undertaken by the Department in the AWS auction is having an impact on the market. However, the impact is ever so slight to this point as should be expected.

Another report from Ian Hardy of mobilesyrup, discusses the latest IE Market Research report which predicts that the Big 3 will continue to lose market share and hold around 90% of the market by the end of 2012. The other 10% of market share will be spread across the other carriers such as SaskTel, MTS and the new entrants.

In Figure 4 below, if the forecast is correct, new entrants should acquire roughly 3.2 % of the market by the end of 2012.

	Sep-10	Dec-10	Mar-11	Jun-11	Sep-11	Dec-11	Mar-12	Jun-12	Sep-12	Dec-12
Subscribers ('000's)										
New Entrants (Wind, Mobilicity, Public Mobile)	183	312	351	429	507	585	663	741	819	897
Total Market	24,658	25,353	25,533	25,921	26,299	26,668	27,029	27,380	27,723	28,057
Subscriber Growth (YOY):										
New Entrants (Wind, Mobilicity, Public Mobile)					177.60%	87.60%	88.90%	72.70%	61.50%	53.30%
Total Market					6.70%	5.20%	5.90%	5.60%	5.40%	5.20%
Share of Total Subscribers:										
New Entrants (Wind, Mobilicity, Public Mobile)	0.7%	1.2%	1.4%	1.7%	1.9%	2.2%	2.5%	2.7%	3.0%	3.2%

Figure 4 Impact Forecast of New Entrant Competition on the Market

The combined reports clearly indicate that the efforts undertaken by the Department in the AWS auction are having a positive impact on the market.

Q 7-3. “In light of the current conditions in the Canadian wireless service market(s), is there a need for specific measures in the 700 MHz and/or 2500 MHz auction to increase or sustain competition?”

7.4, Yes. More support by the Department is needed to foster a sustainable and healthy competitive market. Time and raw materials are required for new entrant competition to overcome the entrenched positions of the Big 3. As discussed throughout these response comments, the Big 3 maintain a dominant position in the market and can thereby continue to dictate pricing. In fact, they can focus their resources in order to try and crush competition. Pricing has come down in certain segments of the market but ever so slightly. Even new entrants are not

certain they can survive in the market at this point. New entrants and continued investment needs encouragement. Spectrum assets need to be more evenly distributed amongst industry competitors. New entrants need to have most of the spectrum offered in the 700 MHz and/ or 2500 MHz auctions “set aside” for them to bid on. The process of levelling the spectrum playing field will lead to accelerating new competitor’s ability to launch new services and acquire market share. As new entrants gain market share and become established, anti-competitive market practices will cease as the Big 3 will be forced to compete. The Canadian consumer will benefit in the long run. The differences between providing more support now can be measured in billions of dollars as the economy in general benefits from lower priced, higher value services. The digital economy improves significantly and jobs generated in the wireless and other sectors are amplified as a direct result of promoting more competition now in the mobile market.

Q 7-4. *“The Government of Canada has undertaken a consultation on potential changes to the foreign investment restrictions that apply to the telecommunications sector. How would the adoption of any of these proposed changes impact your responses to the questions above?”*

7.5, It would be respite for the Department to encourage new market competitors if the Big 3 were to be provided the same access to changes in foreign investment restrictions as new entrants. New entrants cannot compete with the Big 3 who have solid balance sheets, preferred and established access to all available major Canadian capital pools, other revenue sources, they hold over 90% of subscribers, 85% of spectrum assets, the vast majority of core infrastructure and virtually all major distribution channels.

New entrants have to be more creative and are forced to look elsewhere for capital while bringing innovative ideas to the market. The Big 3 on the other hand are well established, do not have a problem with respect to raising capital and as history demonstrates; they do not innovate. Instead, the Big 3 selects proven products and services that produce the highest returns from elsewhere in the world. They lock down exclusives (even the handsets) whenever possible and then ride those products and services for as long as they can. Without restraint, incumbents and their affiliates will continue to dominate the market and be in an even stronger position to force consolidation by squeezing out competition as history demonstrates.

On the other hand, relaxing restrictions on foreign investment for new entrants (defined as any competitor with less than a 10% market share) allows for the development of sustainable competition. If restrictions on foreign investment are to be changed, the Department needs to consider the broader and potentially significant impact those decisions would have on changing the market. The results will be with us perhaps for years to come. On one hand, those decisions could lead us to consolidation with a couple of competitors and a return to “rational pricing”. Alternatively, those same decisions could lead to a healthy, sustainable and highly competitive market for decades to come.

7.2 Specific Mechanisms Applicable to the 700 MHz and 2500 MHz Auctions

Q 7-5. "If the Department determines that there is a need for measures to promote competition, which of the above mechanisms would be most appropriate and why should this mechanism be considered over the other?" Comments should also indicate if further restrictions should apply so that policy objectives are met, for example, over a given time period?

7.6, If the Department determines it will take measures promoting competition, a spectrum "set aside" would be the most effective means to precipitate that goal. Spectrum caps have been tried in the past with mixed results and were eventually rescinded as this consultation document notes. In order to upgrade or remove the caps, yet another layer of consultations will need to take place which is costly and time consuming. Most notably in defence of not bringing back "the cap", we note the problem that occurred when TELUS purchased clearNET. TELUS returned spectrum that put them over the cap. Within a few years the cap was removed but by then; another auction had taken place and the returned spectrum was part of the intervening auction process. That's not an optimum result for any market competitor. Capping of the 700 MHz spectrum band is an interesting choice to consider given it can be applied both in the context of location and capacity or any combination thereof. Our view is that it presents a convoluted set of rules and conditions that would produce needless uncertainty. Furthermore, once a cap is in place, there will come a point where the cap either has to be increased or removed due to changing market conditions which may not coincide with a competitive process.

The main advantage of the set aside is that it is straightforward; everyone knows what is at stake and can plan better. Once the auction is completed, the spectrum asset enters the market and market forces prevail. There is no uncertainty; no need to revisit the decision, no complex rules and secondary markets can apply. A hold period of 5 years on transferability to a non-qualified industry competitor should apply as in the case of the AWS spectrum auction. However, trading and other business mechanisms should be encouraged as long as the license is not transferred for simple monetary gain by the licensee.

“In light of your response above, and recognizing that pending decisions on the specific band plan, spectrum for public safety system, tier sizes and open access requirements could influence your response.”

Q 7-6. (a) *“If the Department were to implement spectrum aggregation limits (caps):”*

(i) *“Should the cap apply to the 700 MHz band only or be broader?”*

7.7, We are of the opinion that if the Department decides that a cap is to be implemented, it should be much more broadly applied. Currently, we have 85% of the total available spectrum in the hands of just a few industry competitors. Having such an advantage will not promote a healthy competitive market and could lead to further industry consolidation. Continuing to increase the disparity of spectrum assets between industry competitors just feeds the existing plutocracy that has plagued the industry for almost a decade.

Allowing a few market competitors to maintain such large spectrum reserves relative to other industry competitors does not promote the most efficient use of the spectrum. We question the wisdom of placing more spectrum assets in the hands of just a few industry competitors. For example;

- Would these few major competitors use the asset immediately and efficiently or would they simply buy it “because it is there” and they know it maintains a major barrier to entry? In other words, limiting potential competitor’s spectrum assets in turn limits what products & services they can offer. Holding most of the spectrum keeps competitors weak until they can be extinguished.
- Does allowing these few market competitors to continue to increase their share of the total available spectrum assets relative to the rest of the market in any way benefit the consumer? As history in Canada has demonstrated, it leads to consolidation, rational pricing, high margins and lagging introduction of new products and services.
- If the spectrum assets made available to these few market players was made more difficult and/ or expensive to acquire, would they buy only what they value and need? The results of the AWS auction process clearly indicates they will fight amongst themselves and pay a premium for spectrum they actually value & need.

(ii) *“What should the size of the cap be?”*

7.8, The cap should be set such that any competitor having more than 10% market share cannot acquire more than 10% of any spectrum assets being offered collectively in a competitive licensing process. The process of reducing

the Big 3's spectrum holdings relative to the rest of the market needs to begin immediately.

(iii) *"Should bidders and their affiliates or associates share the cap?"*

7.9, Bidders, their affiliates and associates should share the same spectrum cap.

(iv) *"How long should the cap remain in effect?"*

7.10, The cap should remain in effect at least until market forces demonstrate that the available spectrum resources have somewhat equalized between competitors. Furthermore, there should no anti-competitive practices taking place in the market indicating that healthy competition exists. The relevance of the cap remaining in place could be reviewed possibly every five or 10 years or as part of any future competitive licensing process.

(b) *"If the Department were to implement a set-aside in the 700 MHz auction:*

(i) Who should be entitled to bid in the set-aside block(s) and should the entitled bidders be restricted to bidding on the set-aside only?"

7.11, Any new entrant competitor with less than 10% total market share and not with the known ability to acquire more than a 10% market share in a five year period should be allowed to bid on all available spectrum. Market forces should, to the greatest extent possible and without taking away from the objective of promoting more competition; determine the actual value of the spectrum. The Big 3 do not need any insulation from new entrant bidders. As demonstrated on more than one occasion, the Big 3 can afford to buy whatever they need. In the 2008 AWS auction, new entrants were offered roughly 40% of the available spectrum and came away with roughly 45%. Incumbents bid heavily on the spectrum made available to them and the result was a most successful competitive process.

(ii) "How much spectrum should be set-aside and which block(s) should be set-aside?"

7.12, A minimum of 80% of the spectrum being auctioned should be made available to new entrants with the remaining 20% being made available to everyone. If the Big 3 competitors bid, then they will bid on what they actually need and plan to implement in the near future. In order to promote sustainable competition, a level playing field is required with respect to spectrum assets. Currently, the Big 3 hold 85% of all available spectrum resources. As a result, they dominate the market, can influence the level of competition and continue to dictate pricing and services offered.

(iii) *“If the set-aside were to include multiple blocks of spectrum, should they be contiguous?”*

7.13, Set aside blocks should be made as valuable as possible in order to extract maximum value for the resource. Making blocks contiguous enhances their value.

Q 7-8. *“The Government of Canada has undertaken a consultation on potential changes to the foreign investment restrictions that apply to the telecommunications sector. How would the adoption of any of the proposed changes affect your responses to the questions above?”*

7.14, see the response to 7.5 above.

10. Auction Timing

Q 10-1. *“The Department is considering three options to proceed with the 700 MHz and 2500 MHz bands auction processes:”*

10.1, As discussed earlier in section 4, demand for mobile bandwidth is increasing dramatically. This consultation document acknowledges such. The Cisco forecast also points to a dramatic increase in demand for bandwidth. Given the need to respond to that demand quickly and cost effectively, we are of the opinion that Option 3 represents the best course of action for the Department.

“Option 3: to conduct one combined auction for licences in both the 700 MHz and 2500 MHz bands, this would be six months later than the first auction in the case of separate auctions.”

Options 1 & 2 require two costly processes for both the Department and industry. Further, these additional costs associated with participation in two separate processes may not precipitate extracting the maximum return for spectrum resources. There is a considerable time delay between acquiring spectrum and deploying network infrastructure. Getting this spectrum into the market as quickly as possible will help to meet the market demand for more mobile bandwidth.