

May 16, 2011

VIA E-MAIL: Spectrum.Planning@ic.gc.ca

Manager, Mobile Technology and Services Industry Canada 300 Slater Street Ottawa, Ontario K1A 0C8

Dear Sirs/Mesdames:

Re: Canada Gazette Notice SMSE-005-11, Decisions on a Band Plan for Broadband Radio Service (BRS) and Consultation on a Policy and Technical Framework to License Spectrum in the Band 2500-2690MHz (Canada Gazette, Part I, Vol. 145, No. 7 — February 12, 2011) (the "Gazette Notice").

- Bragg Communications Inc., operating as EastLink ("EastLink"), appreciates the opportunity to provide its reply comments in relation to the issues raised by Industry Canada (the "Department") in the above-noted Gazette Notice (the "Consultation Paper").
- 2. EastLink is a prime example of the benefits that a competition-oriented framework has produced for consumers in the wireline telephony market, offering customers new choices both in terms of providers and services. There is every reason to expect that EastLink will be as successful competing in the mobile wireless market as we have been in the local telephony market. However, EastLink's success in providing consumers with competitive wireless services is subject to spectrum access. The combination of new subscribers, increased mobile data usage by wireless consumers, and EastLink's limited AWS spectrum holdings will lead quickly to a situation where EastLink needs access to additional high-frequency spectrum, which is best suited for boosting capacity in

high-traffic areas. The 2500 MHz spectrum will be critical in providing the capacity EastLink needs to offer consumers the mobile data services they are increasingly demanding. EastLink expects that other new entrants are in comparable positions.

- To that end, EastLink reiterates herein the key proposals set out in its comments
  of April 19, 2011. EastLink believes that adoption of these proposals is necessary
  to achieving the Department's goal of increasing competition in the wireless
  market.
- 4. EastLink also addresses some of the issues raised in other parties' filings, each dated April 19, 2011. We have focused our submission on a few key issues and have not addressed every argument raised by each of these parties. Accordingly, EastLink generally denies any allegations or arguments in the submissions of other parties that are contrary to EastLink's stated positions, and failure to address any specific comment made by such a party should not be interpreted as agreement or concurrence with such comment where such agreement or concurrence would be contrary to EastLink's interests.

## Inukshuk should not be permitted to bid in the 2500 MHz spectrum auction

- 5. In its original submission EastLink highlighted the importance of the 2500 MHz spectrum given its strong capacity and low propagation characteristics, which make it spectrally efficient for boosting capacity in high-traffic areas. EastLink also noted the growing popularity of tablet devices and the general increase in mobile data usage as factors making access to additional capacity in high-traffic areas a critical factor in EastLink's ability to compete against incumbent carriers. These incumbent carriers currently hold substantially more high-frequency spectrum than EastLink, which has limited holdings in the comparable AWS band.
- 6. EastLink specifically noted that Inukshuk the Bell-Rogers joint venture holds much of the 2500 MHz spectrum, including 33% of available 2500 MHz spectrum in Region A and a staggering 67% in Region B. As a result, EastLink submitted

that, to ensure consumers have competitive service options in those regions, all of Inukshuk, Bell and Rogers (referred to herein as "Inukshuk"), should be banned from participation in the 2500 MHz spectrum auction.

- 7. Many other parties agreed with this principle in their submissions. MTS Allstream noted, "To allow the incumbents, particularly Rogers and Bell, who already hold more spectrum in the band than is available for auction, to purchase even more spectrum in the band, would severely limit if not deny new competitors' access to this important spectrum resource," and called for measures to "preclude Rogers and Bell from acquiring more 2500 MHz spectrum." Quebecor and Shaw each separately submitted that Bell and Rogers should be excluded from acquiring additional spectrum in Region B, where Inukshuk holds 120 MHz of a total 180 MHz in spectrum.
- 8. Finally, Telus submitted that Inukshuk should at minimum be prevented from bidding on the portion of the 2500 MHz spectrum that the Department had "clawed back" in the band refarming, since letting Inukshuk repurchase the spectrum would negate the purpose of the clawback. Telus also submitted that Inukshuk should be further excluded from the auction altogether, suggesting it would be inappropriate if band entrants like TELUS could only buy a theoretical maximum of 60 MHz in Region B, due to Inukshuk's substantial holdings in that region, while Inukshuk could buy more than this in Regions A and C. Regarding the possibility that Inukshuk be allowed to bid on the 20 MHz of TDD spectrum it currently does not hold in Region A, Telus submitted, "It is certainly unclear to TELUS based on either need or policy why such a TDD monopoly should be permitted."
- 9. As a result, EastLink believes there is a general consensus among both wireless new entrants (carriers with less than 10% of the national wireless market share) and band new entrants (wireless new entrants and Telus) that all of Rogers, Bell and Inukshuk should be excluded from the 2500 MHz auction.
- 10. For its part, Rogers submitted vague comments on its network roll-out plans with Bell (under the Inukshuk joint venture) and noted that in some cases, under

certain circumstances, Rogers might only have access to half of Inukshuk's substantial 2500 MHz spectrum holdings. EastLink submits that the Department should not be distracted by Rogers' posturing regarding its future relationship with Bell. Instead the Department should consider the current reality that Inukshuk is a single entity that has collected a large cache of 2500 MHz spectrum with the stated intention of building a national "wireless broadband network" that Rogers and Bell would share, and that Inukshuk continues to exist as a single entity holding 33% of the 2500 MHz spectrum in Region A and 67% of the spectrum in Region B. EastLink agrees with MTS Allstream's comment that Inukshuk should not be able to buy spectrum in Regions A and B "regardless of the status of their relationship through Inukshuk or otherwise."

11. Given EastLink's position that Inukshuk should not be permitted to participate in this auction, EastLink' assumes through the rest of this submission that Inukshuk will not be participating.

# **Promoting Competition**

- 12. EastLink submitted in the April 19, 2011 submission that excluding Inukshuk was not enough in itself to ensure that new entrants have necessary access to the 2500 MHz spectrum. EastLink has noted in previous submissions on the 700 MHz auction why new entrant-access to spectrum is critical in ensuring that the Department's goals of lower prices, more consumer options, and more innovative services in the wireless market are met. EastLink's detailed comments on the importance on fair access to spectrum in ensuring competition can be found in our reply comments on the 700 MHz auction at: <a href="http://www.ic.gc.ca/eic/site/smt-gst.nsf/vwapi/SMSE-018-10-Eastlink.pdf/\$FILE/SMSE-018-10-Eastlink.pdf">http://www.ic.gc.ca/eic/site/smt-gst.nsf/vwapi/SMSE-018-10-Eastlink.pdf</a>/ While we will not reiterate them in this submission, all the same competition principles described in the above referenced document apply to this 2500 MHz spectrum auction..
- 13. In this proceeding, incumbents have incorrectly submitted that new entrants have nearly all the spectrum they will need through to 2015. For instance, Telus provided a table which purports to establish the spectrum requirements of all

wireless carriers. Telus' table suggests that new entrants require minimal additional spectrum and that Telus requires substantially more spectrum. Telus' basic premise for the table is that Rogers "needs" all of its spectrum depth to serve its customers and that, therefore, Rogers' subscriber-to-spectrum ratio is the minimum required to provide advanced wireless services. EastLink submits that this is an incorrect assumption. EastLink submits that this table should be disregarded in its entirely since there is no evidence to substantiate its estimates and it makes unfounded assumptions about other carriers' subscriber forecast and needs. In addition, according to Telus' own calculations, not a single US carrier has as much spectrum per subscriber as Rogers, and yet, these carriers are able to provide advanced wireless services. So Telus' use of the Rogers' ratios is clearly inappropriate.

14. Instead, EastLink submits Telus' table is designed only to establish that because it has less spectrum per subscriber than Rogers it has additional need for spectrum. However, Telus does have access to just as much spectrum in most spectrum bands through its partnership with Bell. It is also notable that, according to Telus' own calculations, Telus on its own holds more spectrum than all 2008 entrants combined; Rogers and Bell each hold more than all carriers, including Telus. Surely, in the interest of fostering true competition in the wireless market, this is the imbalance that must be addressed under the 2500 MHz auction. In addition, as noted above, EastLink has been successful in the local telephony markets and expects to duplicate its success in the wireless markets, which will relieve the wireless incumbents to some degree of the subscriber burden on their networks.

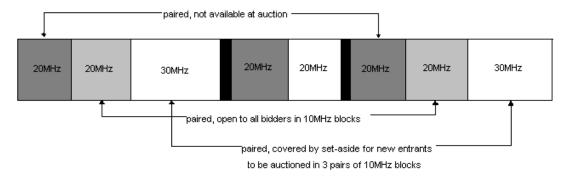
#### Set Asides

15. Some parties submitted that a spectrum cap would be sufficient to provide new entrants with needed access to the 2500 MHz spectrum but EastLink does not believe that a cap would ensure that at least two new entrants would have access to the 2500 MHz spectrum in each license area. MTS Allstream and Shaw separately proposed a 40 MHz in-band cap, while Quebecor and Telus separately advocated for a 40 MHz cap on the FDD spectrum. EastLink submits

that in either case, new entrant access would be undesirably limited, especially in Region B.

- 16. For example, in Region B where there is only 60 MHz of FDD spectrum available for purchase, under both proposals, one carrier could purchase 40 MHz of the spectrum, leaving just one block of 20 MHz left for a new entrant to acquire. For reasons highlighted in EastLink's above mentioned reply comments on the 700 MHz spectrum auction, it is likely that Telus would acquire the full 40 MHz under the cap, creating a situation where just one new entrant in Region B areas would have access to the capacity needed to support the data-heavy services that consumers are increasingly demanding.
- 17. In Region A, MTS' and Shaw's spectrum cap proposals would have an effect comparable to what EastLink's recommended set-aside mechanism would produce. Namely, that Telus could purchase up to 40 MHz of spectrum, leaving 60 MHz of FDD spectrum and 20 MHz of TDD spectrum available for new entrants. However, EastLink submits that it would be better to have a consistent set-aside mechanism for both Region A and B that could ensure at least two new entrants have access to 2500 MHz spectrum in both regions, without disadvantaging Telus.

EastLink's Spectrum allocation proposal for BRS band in Region A

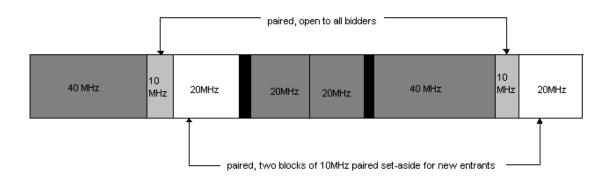


Inukshuk holds 60MHz of 180MHz = 33% Open to all bidders is 40MHz of 180MHz = 22% Set-aside for new entrants is 80Mhz of 180MHz = 45%

## Region A

18. EastLink reiterates its proposal that three blocks of 20 MHz spectrum and the 20 MHz TDD spectrum be set aside for carriers who do not currently own more than 10% of the national market share (called "new entrants" herein). The remaining two blocks of 20 MHz spectrum would be made available for any carrier, other than Inukshuk, to bid on. This arrangement in Region A would provide enough blocks of spectrum under the set-aside that at least two new entrants could enter the market in any particular region, without unfairly disadvantaging larger existing carriers from acquiring the spectrum they may desire for their future plans.

## EastLink's Spectrum allocation proposal for BRS band in Region B



Inukshuk holds 120Mhz of 180MHz = 67%

Open to all bidders is 20MHz of 180MHz = 11%

Set-aside for new entrants is 40MHz of 180MHz = 22%

## Region B

19. EastLink reiterates its proposal that two blocks of 20 MHz spectrum should be set aside for carriers that do not already hold more than 10% of the national market share and the remaining one block of 20 MHz spectrum should be available to all bidders, other than Inukshuk. This proposal would allow for the two new entrants that EastLink believes are necessary to encourage competition to acquire spectrum in Region B but would not unfairly prevent larger existing carriers from acquiring the spectrum they may desire for their future plans.

#### **Block Sizes**

- 20. EastLink notes that a few parties, including all three incumbent wireless carriers and SaskTel proposed the Department adopt block sizes of 10 MHz in the FDD spectrum and of either 5 or 10 MHz in the TDD portion. These parties submitted that the smaller block sizes would allow for the maximum number of bidders to acquire spectrum and that these bidders could later aggregate the spectrum into larger blocks. However, this so-called benefit of allowing for many bidders is a theoretical argument that serves to benefit only the incumbents.
- 21. The 2500 MHz band's substantial capacity advantages would be wasted for Canadian consumers if blocks as small as 10 MHz were to be used. All carriers agreed that 20 MHz is the minimum of contiguous spectrum needed for LTE deployment. For carriers already holding 2500 MHz spectrum, the smaller 10 MHz FDD blocks could be added to their existing holdings, so it is understandable that incumbents would be comfortable with 10 MHz blocks. Carriers not already holding 2500 MHz spectrum will be stuck only with spectrum acquired under the 2500 MHz auction, unable to align them with larger existing blocks of 2500 MHz spectrum. As a result, EastLink reiterates its proposal that blocks of at least 20 MHz be used to auction the FDD portion of the spectrum. At 20 MHz Canadian consumers would be able to enjoy the benefits of the 2500 MHz spectrum. At the same time, the block sizes would be small enough to allow for a maximum number of winning bidders under the auction, which will allow for the most competition and consumer choice.
- 22. In the TDD band, EastLink reiterates its proposal that the 20 MHz of available spectrum be auctioned in each market as a single 20 MHz block. While auctioning the spectrum as a single block would limit the number of companies operating in the TDD band, to do otherwise is impractical. The TDD band is subject to substantial interference such that carriers would require guard bands of at least 2 MHz to provide quality service. Should the Department break the 20 MHz into two blocks, it would create a situation where one carrier would have a 9 MHz block, while the other would operate with just 8 MHz after establishing its guard bands. This scenario wastes 2 MHz of spectrum and limits the capacity of

both blocks because, as noted above, 5 MHz blocks would not be sufficient to provide competitive services. As a result, it makes sense to allow one carrier to purchase all 20 MHz in available TDD spectrum under the 2500 MHz auction.

#### Tier Sizes

- 23. Many parties suggested that the Department use a mix of Tier 2 and Tier 3 areas with the aim of aligning the serving areas with those of the 700 MHz and other low frequency spectrum holdings. However, EastLink reiterates its proposal that the 2500 MHz spectrum be auctioned using Tier 3 areas. EastLink submits that larger tier sizes are not appropriate because of the propagation characteristics of the 2500 MHz spectrum. The Department recognized this in the conversion of MCS and MDS authorizations to BRS spectrum licences, which were converted based on Tier 3 sizes, except for Inukshuk's licence and SSI's MCS licence, which used Tier 4 sizes.
- 24. EastLink also submits that uniform tier size should be enforced across all spectrum licences. This will simplify the auction process and will result in a more uniform average tier cost covering the same geographical area.

## Timing of the 2500 MHz spectrum auction

25. EastLink did not comment on the timing of the 2500 MHz spectrum auction in its April comments because this issue was addressed during the 700 MHz consultation. However, as some parties raised the issue in this proceeding, EastLink reiterates its comments made in the 700 MHz submission that the 700 MHz should be held first, with the 2500 MHz auction to follow separately. Especially considering EastLink's position that Inukshuk should not be participating in the 2500 MHz auction, holding the two auctions together would put all new entrants and Telus in the position of competing for spectrum in both the 2500 MHz auction and the 700 MHz auction simultaneously, while Inukshuk, sitting on its existing 2500 MHz bounty, would be able to concentrate only on the 700 MHz auction. This would severely disadvantage the new entrants.

26. The 700 MHz and 2500 MHz spectrum bands are necessary for two completely

different reasons and, simply put, every new entrant needs fair access to both

complimentary bands to compete with the incumbents. While there will be a need

for the 2500 MHz spectrum there is no need for this spectrum to be auctioned at

the same time as the 700 MHz spectrum, given that it will be used primarily to

supplement existing capacity in high traffic areas. It makes the most sense to

hold the auctions separately so that new entrants have an opportunity to ensure

appropriate resources and financing can be dedicated to auctioning this

spectrum. Additionally, the Department can apply experiences from the 700 MHz

auction to the 2500 MHz auction, so that all carriers apart from Inukshuk can

tackle the 2500 MHz auction with certainty regarding their holdings in other

spectrum bands.

**Conclusion** 

27. The 2500 MHz spectrum is well suited to providing needed capacity in high-traffic

areas and is the last opportunity new entrants will have for a while to acquire that

capacity, which is critical to ensuring our long-term ability to offer competitive

service in those areas. EastLink's proposals herein are intended to provide some

balance to the market, to allow as much consumer choice as possible by

providing new entrants with access to the spectrum, and to ensure that wireless

customers can benefit from the 2500 MHz spectrum's capacity characteristics.

Sincerely,

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