



October 2, 2017

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Senior Director
Spectrum Licensing and Auction Operations
Innovation, Science, and Economic Development Canada
235 Queen Street
Ottawa, Ontario K1A 0H5

Dear Sir/Madam:

Re: *Canada Gazette, Part I, August 19, 2017, Notice No. SLPB-005-17 – Consultation on a Technical, Policy and Licensing Framework for Spectrum in the 600 MHz Band – Eastlink’s comments*

Please find attached the comments of Bragg Communications Inc., carrying on business as Eastlink (“Eastlink”), in response to Canada Gazette Notice SLPB-005-17 – *Consultation on a Technical, Policy and Licensing Framework for Spectrum in the 600 MHz Band* (Part I, August 19, 2017).

We appreciate the opportunity to provide our views to the Department.

Sincerely,

A handwritten signature in blue ink, appearing to read "Denise Heckbert".

Denise Heckbert
Director, Wireless Regulatory, Eastlink

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**INNOVATION, SCIENCE, AND ECONOMIC DEVELOPMENT CANADA
CONSULTATION ON A TECHNICAL, POLICY AND LICENSING FRAMEWORK
FOR SPECTRUM IN THE 600 MHz BAND
CANADA GAZETTE, PART I, AUGUST 19, 2017 (SLPB-005-17)**

**COMMENTS OF
BRAGG COMMUNICATIONS INC., OPERATING AS EASTLINK**



2 OCTOBER 2017

1. Bragg Communications Inc., carrying on business as Eastlink (“Eastlink”), appreciates the opportunity to provide comments on the issues raised under SLPB-005-17 – *Consultation on a Technical, Policy and Licensing Framework for Spectrum in the 600 MHz Band* (the “Consultation”).
2. Under the Consultation, Innovation, Science and Economic Development Canada (the “Department”) seeks comments on its proposed auction and licensing framework for the 70 MHz of available spectrum in the 600 MHz band. Eastlink herein provides our comments.

Low-band spectrum critical to sustainable competition

3. Eastlink supports and shares the Department’s clear objectives for this 600 MHz policy and auction framework. Specifically, the Department stated:
 - (i) “ISED views the release of the 600 MHz band as an opportunity to encourage investment and improve services provided by both newer and established carriers.”¹
 - (ii) “...it presents a key opportunity to support competition.”²
4. Eastlink fully supports the Department’s stated objectives, noted above. In particular, the Department’s support of competition must recognize that, for competition to exist to the benefit of Canadians, it must be facilities-based and sustainable competition. Eastlink submits that the above objectives demand a framework that ensures that wireless service providers already investing in mobile wireless networks and serving Canadian consumers have reasonable opportunity to access the 600 MHz spectrum, and particularly that newer regional service providers with limited resources compared to their large national competitors have reasonable access to the limited spectrum resources available under this auction.
5. Regional service providers have invested hundreds of millions of dollars in mobile wireless networks since 2008, largely relying on mid-band spectrum, and it is critical that these operating regional service providers have long-awaited access to meaningful low-band spectrum holdings in order to satisfy the Department’s above noted objectives. Eastlink

¹ Consultation, Paragraph 7

² Consultation, Paragraph 7

generally supports the Department's proposed framework, with a few minor suggested updates detailed herein, as we believe the framework aims to ensure regional service providers are provided such reasonable access to 600 MHz spectrum.

6. Eastlink submits that this 600 MHz auction is the most important for rural Canada since the Department first enabled regional service providers to enter the mobile wireless market in 2008. The Department's decision to set aside spectrum in 2008 was instrumental to the entry of new regional competitors and has had a strong and positive impact on Canada's mobile wireless retail market, with per-use prices steadily declining, the most advanced networks in the world being widely deployed, and increasingly consumer-friendly policies and programs launching each year, driven largely by the competition from regional service providers.
7. At the same time, Canadians have yet to experience the full extent of the benefits of the wireless competition, due to three key factors impacting regional non-incumbents (in addition to the current uncertainty regarding mandated resale):
 - (i) Unreasonably high wholesale roaming rates,
 - (ii) Unreasonably high wholesale tower sharing rates, and
 - (iii) Insufficient low-band spectrum to support competitive network deployment.
8. Eastlink notes that the CRTC is currently in the process of setting wholesale roaming rates and we are optimistic that the Commission will come to a reasonable rate determination, addressing the first issue above. We further note that the CRTC has made clear that parties are able to bring forward applications to consider wholesale tower sharing rate reviews,³ and the second issue above may be addressed via such processes.
9. However, this 600 MHz auction is the only opportunity for the foreseeable future to address the third factor currently impeding further and sustainable competitive network deployment in rural areas by non-incumbent service providers. Due to its propagation characteristics, low-band spectrum – spectrum below 1 GHz – is ideal for efficiently deploying networks to rural areas. Low-band spectrum is also important for in-building penetration in urban areas, but its key social and economic benefits lay in its positive impact on the challenging economics of deploying competitive wireless networks in rural areas, as service providers would require

³ TRP CRTC 2015-177

fewer sites to cover large areas using low-band spectrum. For example, to build the same rural area with AWS-1 spectrum would require two to three times the towers required to cover the area with 600 MHz spectrum; each additional tower adds considerable upfront capital cost as well as long-term operational costs, particularly when considering the unreasonably high wholesale cost of sharing national incumbent providers' towers.

10. In the Consultation, the Department recognized that the 600 MHz band “presents a key opportunity to support competition and the provision of high quality and innovative wireless services to Canadians.”⁴ Eastlink supports the Department’s proposal to take advantage of this opportunity to “maximize the economic and social benefits that Canadians derive”⁵ from the 600 MHz band by implementing pro-competitive measures that will help regional service providers access much needed low-band spectrum.
11. Eastlink submits that the proposal to set aside spectrum is also consistent with the Department’s broader rural initiatives. The Department has repeatedly emphasized the importance of rural networks to ensure that all Canadians can participate equally in the digital economy, and is undertaking a program worth hundreds of millions of dollars to promote deployment of mobile wireless and other broadband services in rural areas in order to support these same policy objectives.⁶ Eastlink submits that ensuring regional service providers have a reasonable opportunity to acquire much needed low-band spectrum under this auction is an economically efficient means of supporting rural deployment, as service providers with sufficient low-band spectrum will make significant investments in rural areas, minimizing the need for reliance on Government funding for rural deployments or other funding initiatives.
12. For example, Eastlink has launched services in all four Atlantic Canadian provinces and northern Ontario and is working to continue expanding our network in these areas. In some places we are building the only competitive network, and in certain areas, we are the only wireless service provider filling key coverage gaps in rural areas. The response from our competitor service providers to our deployment of advanced network technology has been clear as they more rapidly built LTE networks in Nova Scotia and PEI than they did in other, more populated parts of the country where there was no LTE-network competition.

⁴ Consultation, Paragraph 7

⁵ Consultation, Paragraph 4

⁶ Connect to Innovate <https://www.canada.ca/en/innovation-science-economic-development/programs/computer-internet-access/connect-to-innovate.html>

13. Eastlink's focus on rural areas is not just coverage expansion but also innovative technology launches – we launched Canada's first 100% VoLTE network (with no HSPA+ underlay) in Timmins, Ontario last year, putting Timmins at the leading edge of global network technology. (We have since expanded the VoLTE network to other parts of northern Ontario and throughout Atlantic Canada.)
14. We have also made available throughout our operating area innovative service plan options, such as separating the cost of the device from the cost of the plan so that customers pay only for what they want and their monthly costs decrease dramatically when their device is paid off. In addition, we are the first to offer Worry-Free Data service, which caps data use at the amount included in the monthly plan so that our customers do not incur any inadvertent overages, and so the account holder is in control of his/her monthly costs. At the same time, as the Department noted in the Consultation, "on average, new entrants offer prices up to 36% less than the national incumbents."⁷
15. Eastlink submits that advanced network technology competition and service plan innovation in rural areas – and, in fact, sometimes being made available first in rural Canada – is exactly in line with the Department's objectives for its spectrum licensing policy and auction frameworks. This competition, which encourages rapid deployment of advanced technology and customer-friendly service offerings is not likely to occur – and certainly not in rural areas – without meaningful and sustainable competition from regional wireless service providers. As a result, it is critical that the Department make sufficient 600 MHz spectrum available regional service providers under this auction and policy framework.

Proposed framework

16. As noted above, Eastlink supports the Department's proposal for a set-aside, although we submit that the set aside should be 40 MHz instead of 30 MHz to close the spectrum gap between national incumbent providers and regional competitors. The national incumbents have more than enough low-band spectrum, as compared to their US-based counterparts, AT&T and Verizon, which serve 10 times the subscribers of Bell/Telus and Rogers using the same, or less, low-band spectrum. Table 1 compares low-band spectrum holdings in the

⁷ Consultation, Paragraph 17

biggest Canadian and US cities. We note that AT&T and Verizon were comfortable enough with their holdings that they did not participate actively (or at all, in the case of Verizon) in the 600 MHz auction. Clearly, Canada’s national incumbents have sufficient low-band spectrum to serve their customers.

Table 1. Low-band Spectrum Holdings

US Top 5 Cities (by pop)	AT&T and Verizon - Average	Canada Top 5 Cities (by pop)	Rogers and Bell/Telus - Average	New Entrant - Average
New York	50 MHz	Toronto	53 MHz	10 MHz
Los Angeles	50 MHz	Montreal	53 MHz	10 MHz
Chicago	50 MHz	Calgary	53 MHz	10 MHz
Houston	50 MHz	Ottawa	53 MHz	10 MHz
Philadelphia	50 MHz	Edmonton	53 MHz	10 MHz

17. However, the Canadian national incumbents hold far more spectrum than their regional competitors, which limits regional service providers’ ability to provide the same quality of wireless service indoors and/or in rural areas, and to expand networks in rural areas where the additional sites required to build using only mid- or high-band spectrum make such builds economically impractical.

18. For example, due to their limited low-band spectrum holdings, regional providers must build two or three sites for every one site the national incumbents must build to cover any specific area, whether urban or rural. This results in newer service providers, with smaller market share, bearing three times the national carriers’ infrastructure cost in any particular geographic area. This makes it difficult to build infrastructure in new markets, expand into rural areas, and to fill coverage gaps within urban and suburban areas; all of which slows the introduction of competition into new markets and prolongs new entrants’ reliance on expensive wholesale roaming services. At the same time, regional providers with limited low-band spectrum have limited technological options with respect to network generation and other spectrum maximization techniques. For example, regional providers with one or two blocks of low-band spectrum cannot deploy both HSPA and LTE like the national service providers with deeper low-band holdings; instead regional providers must always choose one network technology to deploy over their limited holdings, making it difficult to evolve the network as new generations emerge.

19. It is critical that the disparity between national service providers and regional providers' low-band holdings not worsen under this auction, as doing so would weaken retail mobile wireless competition, which is not in the economic or social interest of Canadians. Eastlink submits that, under the 600 MHz auction, the Department should ensure that regional service providers have a realistic opportunity to narrow the gap in spectrum holdings with those of the national incumbents, so that regional providers can compete on speed and coverage throughout their expanding serving areas.
20. Under the 600 MHz auction, a set-aside is necessary to ensure regional providers have such access to spectrum. Regional service providers simply cannot outbid the national service providers for low-band spectrum in their areas of interest. The Department has more than sufficient evidence in the AWS-1, 700 MHz, and 2500 MHz auctions to make clear that the national service providers will acquire as much spectrum as possible, at any cost, given the opportunity, regardless of whether they actually need the spectrum to serve their customers. In all the above noted auctions, regional service providers attempted to acquire spectrum above and beyond the set-aside or spectrum cap by bidding on open market spectrum during the auction price discovery rounds. In all cases, with only a few minor exceptions in very remote areas, regional service providers were unable to acquire any spectrum other than those licences expressly protected by pro-competition measures under the auction framework. As a result, Eastlink supports the Department's proposal to adopt a set-aside in this auction but we submit it should be extended to 40 MHz in order to further narrow the gap in spectrum holdings.

Minor updates to protect competition

21. Eastlink reiterates that we generally support the Department's proposed auction framework. However, we submit that a few other minor changes to the Department's proposed auction policy and framework are necessary in order to ensure that the Department's stated objectives of promoting facilities-based development and supporting competition are met. In addition to expanding the set-aside to 40 MHz, Eastlink's two key recommended updates are:
- (i) Clarifying in the definition of set-aside-eligible bidders that such bidders will be "...those registered with the CRTC as facilities-based providers that are not national incumbent service providers, and that are actively providing commercial **mobile wireless** telecommunication services to the general public in the licence area of

interest, effective as of the date of application to participate in the 600 MHz auction.”
[Edit emphasized], as detailed in our response to Question 1C below, and

- (ii) Creating two generic licences in each licence area; one set-aside generic licence containing the three or four set-aside blocks, and; one open market generic licence containing the three or four open market blocks, with a bidding rule for set-aside bidders to prevent point parking in the open market blocks. This update would remove the unnecessary complexity regarding price increments and price determination of set-aside licences, as detailed in our response to Question 3 below.

22. Eastlink has responded to the Commission’s 16 questions below.

Consultation questions

Q1A—ISED is seeking comments on its proposal to implement a set-aside as a pro-competitive measure in the auction process for the 600 MHz band.

23. Eastlink agrees with the Department’s determination that the “incumbent entities likely have the means and ability to prevent other service providers from acquiring spectrum licences in an open auction.”⁸ As Eastlink noted above, the Department has a considerable record of experience over the past 10 years upon which to base its determination that incumbent national service providers will always purchase as much spectrum as possible – regardless of whether the spectrum is required to serve their customers, as compared to their international counterparts – and will thereby prevent regional service players from acquiring any open market spectrum.

24. Regional service providers have consistently attempted to acquire open market spectrum in the Department’s auctions – as evidence by the price discovery round bidding – and, with just a few exceptions, have consistently been able to acquire only the set-aside or spectrum cap-protected licences.

⁸ Consultation, Paragraph 22

25. Simply put, if the Department does not set aside spectrum in this auction, regional service providers will be unable to acquire spectrum in the 600 MHz band. Such a result would make permanent the deep imbalance in low-band spectrum holdings between national incumbents and regional service providers, making it extremely difficult – if not impossible – for regional service providers to deploy networks throughout rural Canada due to the economic challenges inherent in building networks with only higher-band spectrum, which requires more towers per serving area. This would prevent rural Canadians from benefiting from the network-based competition, innovative customer service offerings, and dramatically lower prices offered by regional service providers. Eastlink submits that any policies that would effectively confine the benefits of competition to urban areas would be inconsistent with the policy objectives of the 600 MHz band, the *Act*, and the Department’s stated goals of ensuring rural Canada can participate fully in the digital economy.
26. As a result, we support the Department’s decision to set-aside spectrum for non-national incumbent wireless providers.

Q1B—ISED is seeking comments on its proposal to set aside 30 MHz of spectrum in the 600 MHz band for eligible entities and to have open bidding (no pro-competitive measures) on the remaining 40 MHz in the band.

27. Eastlink reiterates that while the incumbent national providers have an average of 53 MHz of low-band spectrum, non-national incumbents such as Eastlink, Freedom and Videotron have only 10 MHz of low-band spectrum. Setting aside 30 MHz for operating non-national wireless service providers would not close the gap, as the result would be – at best - national service providers with an average 73 MHz and regional providers with an average 40 MHz. This still represents a considerable difference in speeds and wireless network performance (especially when paired with the national providers’ larger mid-band holdings).
28. As the Department’s stated objective for this auction is to ensure regional wireless providers have an opportunity to “effectively compete” with the incumbents, Eastlink submits that the set aside spectrum could be 40 MHz, instead of just 30 MHz. Eastlink further submits that in no case should the set aside be smaller than 30 MHz, as any smaller set-aside would serve to entrench the current imbalance in low-band spectrum holdings making it difficult for regional service providers to compete sustainably.

Q1C—ISED is seeking comments on its proposal to limit the eligibility criteria to bid on set aside spectrum to those registered with the CRTC as facilities-based-providers, that are not national incumbent service providers, and that are actively providing commercial telecommunication services to the general public in the licence area of interest, effective as of the date of application to participate in the 600 MHz auction.

29. Eastlink submits there is a key phrase missing from the Department's proposed eligibility criteria that we believe was inadvertently omitted and which could undermine the Department's stated policy objectives for this auction. Specifically, the phrase "mobile wireless" is missing from the definition, "...eligibility to bid on the set-aside spectrum be limited to those registered with the CRTC as facilities-based providers that are not national incumbent service providers, and that are actively providing commercial **[mobile wireless]** telecommunication services to the general public in the area of interest..."⁹ [phrase added]

30. It appears "wireless" was inadvertently omitted from the definition as it was included in the French version of the Consultation, « Pour évaluer l'admissibilité d'un soumissionnaire au spectre réservé, ISDE entend établir si le soumissionnaire potentiel fournit activement au grand public un service de télécommunication sans fil commercial dans la zone de licence visée. »¹⁰ Eastlink submits that the Department should insert the phrase "mobile wireless" in both versions of the Consultation.

31. Specifically, Eastlink submits the definition of "set-aside-eligible bidders" should be **"...those registered with the CRTC as facilities-based providers that are not national incumbent service providers, and that are actively providing commercial mobile wireless telecommunication services to the general public in the licence area of interest, effective as of the date of application to participate in the 600 MHz auction."**

32. We submit that the change is necessary in order to ensure the definition satisfies the Department's stated policy objectives. The Department stated, "Service providers that have launched wireless services in recent years could benefit from an opportunity to acquire access

⁹ Consultation, Paragraph 29

¹⁰ French Consultation, Paragraph 31

to additional spectrum to support network improvements to meet the wireless traffic demands of their growing subscribership.”¹¹

33. The Department further stated that “the ability to bid on the proposed set-aside spectrum should be limited to a particular sub-set of regional service providers that are best positioned to compete in the commercial mobile services market.”¹²
34. It is then inappropriate and inconsistent with the Department’s objectives not to limit the set-aside-eligible bidders to operating regional service providers that have already invested hundreds of millions of dollars in their networks, already have a “growing subscribership” to support, and have made proven commitments to deployment of mobile wireless services.
35. To be clear, the CRTC’s definition of “facilities-based provider” is extremely broad. An entity with even very limited equipment installed at a carrier hotel in Toronto, and no other infrastructure anywhere in Canada, can be considered “facilities-based,” as indeed several such carriers are registered with the CRTC. The broadness of this definition has led to several misuses and abuses of the CRTC’s facilities-based services regime, as speculators and entities primarily focused on serving foreign wholesale customers have benefited from policies the regulators had established to support network and technology deployment within Canada.¹³ Eastlink submits that the Department should be extremely wary of employing this broad definition as a primary criterion for an auction as critical to rural deployment as the 600 MHz auction.
36. In any case, it is critical that set-aside-eligible bidders be already providing mobile wireless services in the areas where they apply to bid on set-aside spectrum because to allow otherwise would encourage speculative bidding from service providers that have not entered the wireless market yet and may never do so, and/or may never invest meaningfully in the licence area. In the event such a speculative bidder acquired mobile wireless spectrum, the spectrum may lay unused for years while the regional service provider actually investing in the area and offering service would not be able to expand its network into rural areas, improve its in-building coverage in urban areas, or diversify its network technology. This would be entirely inconsistent with the Department’s overarching policy objectives for this spectrum

¹¹ Consultation, Paragraph 27

¹² Consultation, Paragraph 29

¹³ CRTC File #8622-R28-201611781

auction (e.g., to promote competition, and to encourage investment from operating new and established service providers¹⁴) and with its stated objectives for the set-aside (e.g., to provide additional spectrum to mobile wireless service providers that are already offering service¹⁵).

37. Eastlink submits that the Department's approach in the AWS-3 auction of requiring that set-aside-eligible bidders already be offering mobile wireless spectrum in the areas where they applied to bid was the correct approach as it ensured that the spectrum would be used to improve Canadians' services and to further competition. In fact, Eastlink has already deployed and begun integrating the AWS-3 spectrum into our network. Operating regional mobile wireless providers are best positioned to make immediate and efficient use of 600 MHz spectrum, which is in Canadians' best economic and social interest.
38. Eastlink further notes that the Department need not worry about a reasonable return on the set-aside spectrum asset for Canadians, due to the proposed opening bid prices under this Consultation. For example, Eastlink acquired 30 MHz of spectrum under the AWS-3 auction. Without indicating whether or where we may bid in the 600 MHz auction, if we were to acquire the exact same amount of spectrum under the 600 MHz auction in the same licence areas – even at reserve, which is unlikely – we would pay more than three times the amount we paid in 2015 under the 600 MHz auction; more than we have ever paid in any auction. And, we reiterate that it is unlikely we would pay only reserve. The same would be true in other regions across Canada.
39. As the social and economic benefits of facilities-based competition using this 600 MHz spectrum will only be realized where operating mobile wireless providers are able to acquire the spectrum to facilitate deployment in rural areas and to improve coverage within their existing networks, and as Canadians will receive a fair return on the asset during the auction, Eastlink submits that the definition of set-aside-eligible bidder should be clarified to be only those “that are actively providing commercial **mobile wireless** telecommunication services to the general public in the licence area of interest, effective as of the date of application to participate in the 600 MHz auction.”
40. Eastlink otherwise agrees with the criteria set out in Paragraph 31 of the Consultation.

¹⁴ Consultation, Paragraph 7

¹⁵ Consultation, Paragraph 27

Q1D—ISED is seeking comments on its proposal to limit the transferability of the set-aside spectrum for the first five years of the licence term.

41. Eastlink supports the Department's proposal to limit the transferability of the set-aside spectrum for the first five years of the licence term.

Q1E—ISED is seeking comments on its proposal to auction the set-aside spectrum as three separate paired blocks of 5+5 MHz.

42. Eastlink generally supports the Department's proposal to auction the set-aside spectrum in three separate paired blocks of 5 + 5 MHz.

Q2—ISED is seeking comments on its proposal to use Tier 2 service areas across the country, except in the three Territories (Yukon, Northwest Territories and Nunavut) where Tier 4 service areas would apply.

43. Eastlink understands the benefits to ease of coordination and limiting interference in auctioning low-band spectrum such as the 600 MHz band at Tier 2 levels. However, we submit that the Department should consider auctioning the spectrum at Tier 3 levels as it can be more beneficial for rural deployment. Specifically, Eastlink acquired spectrum in southwestern Ontario and northern Alberta in the AWS-1 auction, as we offer television, local phone, and High Speed Internet services in those areas. However, it has been difficult to obtain additional spectrum via auction processes since 2008, due to the regularity with which spectrum is auctioned on Tier 2 levels.

44. Eastlink is unable to outbid auction participants planning to serve Toronto and Calgary for spectrum licences that we may only intend to use in very rural areas of southern Ontario and Alberta. At the same time, set-aside spectrum acquired in the 700 MHz and AWS-3 auctions has not yet been deployed in the rural areas where we operate in Alberta and southern Ontario, indicating that it may be in Canadians' interest to have the spectrum made available to those regional service providers committed to rural areas, and that the related benefits may offset any potential coordination required for interference issues. Eastlink submits that auctioning spectrum at Tier 3 levels would better enable those truly interested in serving rural areas to acquire much needed low-band spectrum in those serving areas.

45. Eastlink does not have any comment on the licence service areas in the Territories.

Q3—ISED is seeking comments on:

a) the proposal to use generic licences; and

b) the proposal to categorize all blocks won by set-aside-eligible bidders as set-aside blocks

46. Eastlink submits that, while we generally support the use of generic licences in this auction, the proposed approach to generic licences may inadvertently complicate the auction process. We submit that a minor amendment to the Department's proposal could considerably simplify the rules.

47. We generally support the use of generic licences as a means of simplifying bidding during the clock rounds. However, the proposal to have a single generic licence in each area with two "products" is complicated and would create at least two contradictory ways of calculating the prices and discount of set-aside licences under the Consultation.¹⁶ We further submit that a generic licence that contains two distinct "products" is not actually a generic licence at all, which is likely causing most of the unnecessary complexity. For example, under the Department's proposal, there would be two distinct prices for a single generic licence – one for set-aside spectrum and one for open market spectrum¹⁷ – during the clock rounds, which is unnecessarily complex for a generic licence. In addition, the proposed pricing approach to set-aside spectrum could result in prices for the set-aside licences climbing so high as to become unaffordable for set-aside-eligible bidders.

48. Eastlink submits that the auction and related winner and price determinations – under any of the three proposed models – would be far simpler if the Department established two generic licences in each licence area; one of four open market blocks and one generic licence of three set-aside blocks (under the current proposal, to be updated if the set-aside is expanded to 40 MHz).

¹⁶ Consultation, Annex C

¹⁷ Consultation, Annex A

49. Under this proposal, it would not be necessary for the Department to predetermine which specific blocks were assigned to each category. The Department could simply state that there are seven blocks, three of which are contained in a set-aside generic licence and four of which are contained in an open market generic licence; the specific blocks to be assigned during the assignment phase.
50. In order to ensure that set-aside-eligible bidders do not dump all their points into the open-market bids during the clock rounds, the Department could establish a bidding rule that set-aside-eligible bidders are only be able to bid on open market spectrum in licence areas where they are set-aside-eligible once they have bid on three set-aside blocks under the set-aside generic licence.
51. Under Eastlink's generic licences proposal, the practical rules are the same. For example, set-aside-eligible bidders can bid on up to seven licences but their first three bids will be on set-aside spectrum. National incumbent bidders cannot bid on set-aside spectrum. And, regional service providers that are not set-aside-eligible in other areas can bid on up to four blocks of open market spectrum in those areas where they are ineligible. The key difference is that the rules about winner determination, price determination, and discounts become much simpler to predict and become much more reliable for set-aside-eligible bidders (and for the open market bidders, for that matter). Eastlink's proposals would also remove the need to tie the set-aside pricing and demand to the open market demand, from which it should be entirely separate.
52. Eastlink submits that, as there are actually two distinct types of licence in each licence area, it is logical and necessary to have two generic licences in each licence area; one set-aside generic licence with three blocks and one open market generic licence with four blocks.
53. Regardless of whether the Department adopts Eastlink's generic licence recommendation, Eastlink submits that only the three set-aside blocks contained in the set-aside generic licence should be categorized as set-aside blocks, regardless of status of the winning bidder. In the event a set-aside-eligible bidder is somehow able to outbid the national incumbents for spectrum in the open market generic licence, that set-aside-eligible bidder should have all the same rights and privileges as the other open market spectrum winners.

54. It would be completely inappropriate to punish a set-aside-eligible bidder and impose additional restrictions on them compared to other open market licence winners simply because they are smaller and newer to the mobile wireless service market.

Q4—ISED is seeking comments on:

a) the use anonymous bidding during the auction; and

b) the information that will be disclosed to bidders during the clock rounds, as described in annex A (which would also apply to the CCA with a modified activity rule set out in annex B) and annex C.

55. Eastlink submits that anonymous bidding generally favours large national incumbent bidders as they inherently have more information available to them during the price discovery rounds, as they have the information about their own much larger bids. As a result, Eastlink generally opposes anonymous bidding as it disadvantages smaller, regional service providers.

56. Under an anonymous format, any information provided serves only to further the advantage held by the large national service providers. As a result, in the event the Department maintains its proposed anonymous format, we submit that the disadvantage to regional service providers should not be worsened by providing additional information such as discount details and/or final aggregate demand on the final clock round. As a result, Eastlink submits that, in the event the auction is to be anonymous, the Department should maintain the same disclosure rules it used in the 700 MHz and 2500 MHz auctions, regardless of auction format used. Specifically, each bidder would get details on the aggregate demand every round, with the exception of the final clock round, and the prices of the open market and set-aside generic licences for the next clock round.

Q5—ISED is seeking comments on:

a) The advantages and disadvantages of the three auction formats being considered for the 600 MHz auction: i. Combinatorial clock auction, using the WARP-based activity rule (annex A); ii. Combinatorial clock auction, using the GARP-based activity rule (annex B); iii. Enhanced combinatorial clock auction (annex C), and

b) Where there is a preference for one of the options, respondents are asked to provide a rationale and explanation.

57. Eastlink reiterates our comments under previous auctions that the CCA format generally discriminates against smaller, regional service providers as the package bidding and winner determination features inherently favour larger national service providers. We submit that the SMRA format is more appropriate for Canada where regional service providers are critical to sustainable competition, particularly in rural areas, and where such providers may value regional licences more than large national service providers. CCA allows large national providers to include regional licences they may not need or particularly value in their larger bids at a fraction of the cost that a regional provider would pay for the licence, due to the CCA's predisposition to favour larger packages rather than maximizing the value for each licence included in the package. In fact, the CCA format encourages national bidders to do so in order to increase the size of their package to ensure they secure the licences they actually value.
58. In the event the Department is committed to a CCA format, Eastlink submits that it should continue to use the WARP-based activity rule as used in the 700 MHz and 2500 MHz auctions, as detailed below.
59. The GARP activity rule is intended to help ensure that service providers secure their final clock package. However, it places severe limitations on the ability to use revealed preference during the clock rounds – a limitation that is likely to primarily impact regional service providers as large national bidders tend to maintain more constant eligibility point levels throughout the auction.
60. In addition, the increased confidence that a regional service provider will be able to win its final clock package due to the tighter revealed preference constraints under GARP only exist in the event that there are no – or very few – unallocated licences at the end of the clock rounds. If there are several unallocated licences at the end of the clock rounds, regional service providers are still at risk of losing their final clock package and may, in fact, be prevented from placing necessary bids to secure the final clock package because of the tighter revealed preference constraints.
61. Similarly, Eastlink submits that the ECCA model would, in real-world application, effectively provide usable additional information primarily to the larger national service providers, due to the proposed approach to predicting likely discounts. Such a result would inadvertently serve

to increase the information asymmetry inherent in the CCA format between larger and smaller bidders. For example, the “likely discount” information provided at the end of each round presupposes that all bidders are bidding on licences they actually want to win, which is not how auctions typically unfold. At the same time, providing total aggregate demand at the end of the final clock rounds enables large national bidders with big budgets the ability to pinpoint exactly what their safety bid needs to be, enabling them to more directly target the packages of smaller regional bidders. However, smaller bidders – whether or not they are aware of the final aggregate demand – are unlikely to have the resources necessary to place the specific safety bid, especially if any of the unallocated licences have increased significantly in value.

62. Eastlink reiterates that the CCA format is inherently biased against regional service providers. The GARP and ECCA rules may appear to provide additional protections to help ensure smaller providers can secure their final clock package. However, because the protections only exist in a theoretical environment that is unlikely to be reflected during the actual auction, the new models would not likely deliver the intended protections and could instead worsen the information asymmetry and the bias toward larger national bidders.

63. As a result, Eastlink submits that the Department, insofar as it determines to use the CCA format, should maintain the WARP format used in the 700 MHz and 2500 MHz auctions.

Q6—ISED is seeking comments on:

a) The proposal that winners of more than one block in a single service area be assigned contiguous blocks; and

b) The proposed structure of the assignment stage, including the order of the assignment rounds and the combination of service areas into a single assignment round.

64. Eastlink supports the Department’s proposal that winners of more than one block in a single service area be assigned contiguous blocks. We further agree that the set-aside generic licence and the open market generic licence could – and should – be assigned at the same time in each service area so that all licence winners in an area have an equal and fair opportunity to express any preference for specific blocks.

65. Eastlink submits that the Department’s proposal that all service areas be assigned in a single round where the service areas form a contiguous geographic area is unclear. As the auction

is at Tier 2 levels, it is possible that the entire country would be auctioned at one time (or at least the ten provinces). Eastlink supports the proposal if that was the Department's intention.

66. Eastlink does not support the Department's proposal that spectrum be assigned in descending order of population as it indicates an inherent bias toward the largest cities in Toronto and there is no clear reason why cities should be favoured over rural areas, particularly as this spectrum is so critical for rural deployment.

Q7—ISED is seeking comments on the proposed methodology for incrementing prices during the clock rounds, as described in annex A.

67. Eastlink generally supports the proposed approach to price increments as set out in Paragraph 84 of the Consultation, but we reiterate that the approach set out in Appendix A is unnecessarily complicated and could result in the price for set-aside licences being artificially inflated. The Department's policy objectives for the set-aside under this auction risk being completely undermined if the price for those licences can be inadvertently increased to the point they become unaffordable due to bidding activity on the open market generic licences.

68. Eastlink submits that the simplest approach would be to create two generic licences in each licence area; one set-aside generic licence with three blocks and one open market generic licence with four blocks (under the current rules, to be adjusted if the set-aside is increased to 40 MHz). The price for each generic licence could then be increased in price based on demand for that particular generic licence and there would be no risk of activity in the open market generic licence inadvertently increasing the value of the set-aside generic licence to the point that no regional service provider could afford it.

Q8—ISED is seeking comments on the proposed Affiliated and Associated Entities rules that would apply to bidders in the 600 MHz auction.

69. Eastlink submits that Bell and Telus should be required to bid as a single Associated Entity under these auction rules. It seems that every auction Bell and Telus bid separately and then, almost immediately following the auction, swap licences regionally to ensure each has access to the other's spectrum in the region where that particular partner is responsible for their

shared network. In this way, Bell and Telus inevitably end up with at least twice the spectrum that any other entity is able to secure.

70. Eastlink supports carriers' ability to secure commercially reasonable agreements in the secondary spectrum markets. However, we note that Bell and Telus' unrestricted ability to acquire spectrum up to allowable individual caps and then invariably combine assets in the secondary markets is an obvious circumvention of the Department's Associated and Affiliated Entities rules under this auction and all of the auctions over the past 10 years, and has created a significant imbalance in spectrum holdings by one network provider – Bell/Telus – as compared to all other network providers. Eastlink submits that this result ultimately undermines the Department's objectives of sustainable facilities-based competition in the retail wireless market.

71. Otherwise, Eastlink supports the Department's proposed rules.

Q9—ISED is seeking comments on the proposed rules prohibiting collusion and other communication rules, which would apply to bidders in the upcoming 600 MHz auction.

72. Eastlink supports the Department's proposed rules prohibiting collusion and other communication rules.

Q10—ISED is seeking comments on its proposal to issue spectrum licences in the 600 MHz band with a 20-year licence term and the proposed wording of the condition of licence above.

73. Eastlink supports the Department's proposed 20-year licence term and the proposed wording of the related condition of licence.

Q11—ISED is seeking comments on the proposals on the condition of licence related to transferability and divisibility, and the proposed wording above.

74. Eastlink reiterates that the proposed generic licence approach is unnecessarily complicated with respect to the set aside, leading to at least two contradictory ways of calculating set-aside licence prices and discounts, and creating rules whereby set-aside eligible bidders would be unfairly punished simply for being regional new entrants.

75. As a result, Eastlink submits that the Department should create two generic licences in each licence area; one set-aside generic licence with three blocks and one open market generic licence with four blocks (under the proposed rules, to be updated if the set-aside is increased to 40 MHz). This would dramatically simplify the process of determining set-aside licence prices and discounts. Eastlink's proposed approach would also ensure that prices for set-aside spectrum are not inadvertently increased by activity in the open market licence to the point that regional new entrants cannot afford the set aside spectrum.

76. At the same time, it would clarify the transfer and divisibility rules; only spectrum licences won in the set-aside generic licence would be subject to the five-year moratorium. In the event a regional service provider is somehow able to outbid a national incumbent for an open market licence, it would be inappropriate to subject that winning bidder to additional rules and restrictions as compared to the other open market licence winners simply because they are a regional provider. Instead, any open market licence won should be exempt from the five-year moratorium regardless of the eligibility status of the winning bidder.

Q12—ISED is seeking comments on the proposed deployment condition of licence as stated above.

77. Eastlink generally supports the proposed deployment condition of licence.

Q13—ISED is seeking comments on proposed conditions of licence outlined in annex G that would apply to licences issued through the proposed auction process for spectrum in the 600 MHz band.

78. Eastlink generally supports the conditions of licence outlined in annex G.

Q14—ISED is seeking comments on the proposed opening bids as presented in table 1.

79. Eastlink would not oppose the opening bids presented in Table 1 insofar as the Department adopts Eastlink's recommendations to (i) update the definition of "set-aside-eligible" to ensure that operating **mobile wireless** operators are able to access the low-band spectrum that is critical to supporting the hundreds of millions of dollars already invested in mobile wireless

networks, and (ii) create two generic licences in each licence area; one set-aside generic licence with three blocks and one open market generic licence with four blocks (under the proposed rules, to be updated if the set aside is increased to 40 MHz). As noted above, the Department could establish a bidding rule that states set-aside eligible bidders would not be able to bid on open market licences in the licence areas where they are eligible unless they have bid on all available set-aside licences, in order to ensure set-aside eligible bidders do not park points in the open market licences in their eligible areas.

80. Eastlink submits that the practical implications of our proposals are consistent with the Department's proposed rules, but Eastlink's proposals would ensure that operating mobile wireless service providers have access to needed spectrum (instead of having it acquired by speculators with no real intent to build), and would significantly simplify the price and discount determination for the set-aside and open market licences. Importantly, Eastlink's proposal would also ensure that the prices for the set-aside licences are not inadvertently increased by activity in the open market licences to the point that set-aside eligible bidders can no longer afford the set-aside licences, as that would undermine the policy objectives of the set aside.

81. Eastlink submits that, under our proposed approach of two generic licences in each licence area, and paired with our recommendation that the Department insert the inadvertently omitted "mobile wireless" criterion from the definition of set-aside eligible bidders, we would generally support the proposed opening bids. We reiterate that the proposed opening bids are very high, and would represent starting bids that are more than three times higher than the final winning bids for the same 15 + 15 MHz spectrum won in the AWS-3 auction. However, in the event that the Department prevents inadvertent price increases from open market activity, and the Department ensures that speculators are unable to artificially increase auction prices above what an actual operating regional mobile wireless provider can reasonably afford, then Eastlink would not oppose the opening prices as proposed.

Q15—ISED is seeking comments on the proposed eligibility points for spectrum licences in the 600 MHz as outlined in table 2, and pre-auction deposits as outlined above.

82. Eastlink generally supports the proposed eligibility points.

Q16—ISED is seeking comments on the proposed renewal process for spectrum licences in the 600 MHz band.

83. Eastlink generally supports the proposed renewal process.

Conclusion

84. The Department's set aside in the 2008 auction allowed Eastlink and other new entrants to acquire the spectrum necessary to build advanced, competitive wireless networks, including in underserved and unserved areas, and to offer innovative and consumer-friendly service packages. Eastlink has used this spectrum to build the fastest and most reliable network in our operating areas, and to launch innovative plans and consumer services, including separating the cost of the device from the plan and our unique data fee management tools. Eastlink already serves many rural communities as an Internet and video service provider, and now as a wireless service provider. We have several new market launches, in primarily rural areas, planned for this year and next, with additional network expansions in planning for the coming years, but we require reasonable access to low-band spectrum.

85. We share the Department's intention of allowing rural Canadians to benefit from advanced wireless services, of encouraging continued network investment from operating new and established mobile wireless service providers, and of supporting sustainable facilities-based competition. We generally support the Department's proposed auction and policy framework as set out in the Consultation. However, we submit that the Department must ensure that the definition of "set-aside-eligible" meets its objectives for the set-aside, and that the Department should ensure that its use of generic licences does not inadvertently impact set-aside pricing such that operating regional service providers are unable to acquire much needed low-band spectrum. We submit that the few minor adjustments suggested herein – particularly inserting "mobile wireless" into the definition of "set-aside-eligible" and the creation of two generic licences in each licence area for set aside and open market spectrum – will help ensure the Department's policy and framework objectives are met, which in turn will maximize the social and economic benefits of this 600 MHz spectrum band for all Canadians, including those in rural areas.

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