

The logo for Eastlink, featuring the word "eastlink" in white lowercase letters on a dark blue rectangular background.

July 25, 2017

*[ic.spectrumauctions-encheresduspectre.ic@canada.ca](mailto:ic.spectrumauctions-encheresduspectre.ic@canada.ca)*

Senior Director  
Spectrum Licensing and Auction Operations  
Innovation, Science, and Economic Development Canada  
235 Queen Street, 6<sup>th</sup> Floor  
Ottawa, Ontario K1A 0H5

Dear Sir/Madam:

**Re: *Canada Gazette, Part I, June 24, 2017, Notice No. SLPB-002-17 – Consultation on a Licence Renewal Process for Advanced Wireless Services and Other Spectrum – Eastlink’s comments***

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Please find attached the comments of Bragg Communications Inc., carrying on business as Eastlink (“Eastlink”), in response to Canada Gazette Notice SLPB-002-17 – *Consultation on a Licence Renewal Process for Advanced Wireless Services and Other Spectrum* (Part I, June 24, 2017).

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

Sincerely,

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

Denise Heckbert  
Director, Wireless Regulatory, Eastlink

Email: [regulatory.matters@corp.eastlink.ca](mailto:regulatory.matters@corp.eastlink.ca)  
6080 Young Street Halifax NS B3K 2A4

**INNOVATION, SCIENCE, AND ECONOMIC DEVELOPMENT CANADA  
CONSULTATION ON A LICENCE RENEWAL PROCESS FOR  
ADVANCED WIRELESS SERVICES AND OTHER SPECTRUM  
CANADA GAZETTE, PART I, JUNE 24, 2017 (SLPB-002-17)**

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



**25 JULY 2017**

1. Bragg Communications Inc., carrying on business as Eastlink (“Eastlink”), appreciates the opportunity to provide comments on the issues raised under SLPB-002-17 – *Consultation on a Licence Renewal Process for Advanced Wireless Services and Other Spectrum* (the “Consultation”).
2. Under the Consultation, Innovation, Science and Economic Development Canada (the “Department”) seeks comments on its proposed terms and conditions for renewing AWS-1 and other spectrum licences auctioned in 2008. Eastlink herein provides our comments.

### **Ongoing challenges in infrastructure development**

3. When Eastlink acquired our AWS-1 spectrum licences in 2008, we understood that we were taking on a significant challenge in building a wireless network – in largely rural, sparsely populated areas – to compete against incumbent providers that had built their networks over decades, in a monopolistic market, which has included public funding, and with simple approval processes in place for building new towers. Eastlink took on the challenge based on the expectation that we would have reasonable wholesale roaming and tower sharing rates, and a somewhat clear and reliable process under which we could build new towers as required.
4. The Department’s set aside spectrum in the AWS-1 auction allowed us to acquire the spectrum needed to build a wireless business. We have been ranked the fastest and most reliable network in our serving area every year since we launched service in 2013,<sup>1</sup> we were the only service provider to launch a 100% 4G LTE network and the first to launch a pure VoLTE service in Canada (launched in Timmins, Ontario last year and now available in five provinces). Eastlink has also made available uniquely consumer friendly offers, including no term contracts, separating the cost of the device from the cost of the plan, and innovative data fees management tools that provide customers unprecedented flexibility and control over their monthly costs. We have expanded our network as quickly as possible, launching service in several new markets each year, and deploying infrastructure in primarily rural areas across

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<sup>1</sup> Eastlink’s LTE Network was ranked “fastest and most reliable” in PC Magazine’s 2013/14, 2014/15, and 2015/16 studies, pushed each year in September.

six provinces. And, Eastlink continues to make significant infrastructure investments throughout our licence area, including rural areas.

5. However, throughout the AWS-1 spectrum licence term, Eastlink has been burdened by unreasonable wholesale roaming and tower sharing rates – including current wholesale domestic roaming rates that are higher than the retail domestic rates the large national carriers charge their retail customers – and by unreasonable tower siting consultation processes in several areas. These have slowed our network expansion efforts and impeded service launches in several markets. The practical impacts of these unnecessary obstacles to infrastructure deployment must be considered as part of the renewal framework.
6. The CRTC is reviewing wholesale roaming rates and we are optimistic that the ultimate result of that process will be more reasonable rates, but, to date, high roaming costs have considerably limited our ability to expand our network within our licence areas, and will continue to do so until the Commission issues a decision on wholesale roaming rates.
7. At the same time, wholesale tower sharing rates continue to be excessively high with the incumbent wireless service providers – other tower owners are more reasonable. It is considerably less expensive to build our own tower than to colocate on towers owned by Bell, Telus and/or Rogers, yet the Department mandates Eastlink to colocate wherever possible. At current rates, this mandate adds unnecessary and unreasonable costs to each network deployment and hinders our ability to launch services in new markets and to fill in coverage gaps within our serving area, prolonging our reliance on wholesale roaming in areas where we could otherwise build out our network.
8. The high cost of sharing the incumbents' towers is made worse by the considerable delays, unreasonable requirements, and other issues we experience. These significant delays in gaining access to each incumbent tower directly delays our planned service launches in new markets. For example, Eastlink must have a minimum satisfactory level of network coverage in a community before we can launch service there, in order to provide a positive customer experience, and to minimize our high wholesale roaming costs. Prolonged delays gaining access to incumbent towers in one market hold up deployment in all the subsequent communities where we plan to deploy our network and offer competitive services.

9. The process of building our own towers can also include unnecessary process and delays. Many municipalities are engaged in the process and work closely with providers to bring the benefits of competitive and high quality wireless services to their constituents. In these cases, the consultation and permitting process may not be quick, but it can be predictable and navigable. In other cases, municipalities may have processes in place, or rely on third-parties to manage their processes, that inadvertently act as a practical barrier to any new tower development. The Department's reluctance to intervene in these cases means that sites required to complete a network in a market and to launch service can be stranded indefinitely in an impassable municipal process. These delays in certain markets have prevented us from beginning network deployment in subsequent markets for the same reasons outlined in the preceding paragraph.
10. We further note that all of these obstacles exist now in the context of considerable uncertainty as to the economics of building a network. The Commission had correctly determined that mandated MVNO access would too negatively impact the case for facilities-based development, and decided – three times – not to mandate MVNO access to public mobile networks.<sup>2</sup> Yet, on June 1, 2017, the Department has asked for a review of the most recent of these three decisions to possibly mandate MVNO access where “most use” is incurred on a third-party owned Wi-Fi network and roaming is used “incidentally” to the Wi-Fi.<sup>3</sup> Eastlink submits that most Canadians incur the majority of their data use on Wi-Fi, using public mobile networks only where Wi-Fi is not available. In fact, most smartphones are preset by the manufacturers to use Wi-Fi networks wherever available to limit mobile wireless use. As a result, there is no practical difference between mandating MVNO access and the Department's request. As Eastlink stated throughout the Commission's review of wholesale roaming, mandated MVNO access would make it impractical for new entrants to build competitive networks, particularly in rural areas where the economics of infrastructure deployment are already strained. Eastlink is optimistic that the Commission will uphold its previous three correct decisions when it issues its regulatory policy determinations early next year, but the possibility that MVNO access may be mandated creates considerable uncertainty regarding network deployment, particularly in rural areas.

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<sup>2</sup> Telecom Decision CRTC 2017-56, Telecom Decision CRTC 2016-60, and Telecom Regulatory Policy CRTC 2015-177

<sup>3</sup> Order In Council, June 1, 2017

11. Given the high wholesale costs and delays described above, our strategy for building out our network has to be carefully executed. This is especially true given the primarily rural nature of our service area. For example, our network planning has to consider factors such as fibre builds and other civil costs in rural areas, the low population density and its impact on investment recovery, and the fact that consumers on new entrant networks incur most of their roaming use in the areas immediately surrounding their home communities which can make building isolated, non-contiguous communities economically inefficient.
12. We submit that the AWS-1 renewal framework and resulting conditions of licence must take these same operating realities into consideration. There are practical impacts to the above-described challenges, particularly with respect to the pace at which we can build our network and offer services in new markets, that must be accommodated by the renewal framework if the Department's policy objective of bringing competitive advanced wireless services to rural areas is to be achieved. Otherwise, wireless service providers may be required to inefficiently redirect resources to satisfy licence conditions, rather than use those resources to serve Canadians and compete in a meaningful, sustainable way.
13. Eastlink has responded to the Commission's eight questions below.

### **Consultation questions**

#### ***A: ISED invites comments on the assessment of the AWS-1, G Block and I Block equipment ecosystems.***

14. Eastlink does not have G Block spectrum and we do not have details on related ecosystems.
15. As the Department noted in the Consultation, the AWS-1 spectrum band has an established equipment ecosystem in Canada and the US. Eastlink has deployed our AWS-1 spectrum across our licence areas and our devices are all compatible with the band.
16. Eastlink is not aware of a 3GPP band designation for the I Block licence that we hold in New Brunswick. As there is no technical standard for the I Block at this time, there is no RAN equipment or mobile device available that incorporates the spectrum. Eastlink is not aware of

any plans to standardize the technical framework for the I Block and, therefore, we are not able to forecast when equipment may become available.

***B: ISED invites comments on the proposal to renew the AWS-1, G Block, and I Block licences that have met their conditions of licence.***

17. Eastlink does not have any comment on the G Block renewals.

18. We support the Department's proposal to renew AWS-1 spectrum licences where the licensee can demonstrate that it is actively providing commercial mobile wireless services with its licence to at least the levels set out in Appendix C of the Licensing Framework.

19. As there is no RAN equipment or mobile device ecosystem available for the I Block licence at this time, Eastlink submits that I Block licences should be renewed even where the licensee is not yet using the licence to provide mobile wireless services, insofar as the licensee is compliant with the other conditions of licence. We submit that no conditions of licence should be established that are impossible to comply with and imposing mandatory deployment and service levels in this block would be an impossible test. Eastlink purchased the I Block licence in 2008 on the understanding that the 3GPP standard would be established, but we do not have any control over the timing of the standard development and, therefore, should not be penalized. In any case, under the AWS-1 licensing framework, the deployment targets set out in Appendix C were not binding and were established only to be used as a potential factor in determining whether to renew. In the case of the I Block, we submit that the Department should not consider the Appendix C targets necessary for renewal.

***C: ISED invites comments on the likely timeframe for availability of equipment capable of providing access to licensed spectrum on an opportunistic basis.***

20. As the Department noted in the Consultation, this seems to be a question for future consultations. Eastlink has not investigated equipment ecosystems for dynamic spectrum allocation, and we would require considerably more detail on how the proposed opportunistic access would function before we could comment.

21. We submit that providing opportunistic access to spectrum in any band would represent a significant change from the way the Department has historically granted access to spectrum and, therefore, any proposals should be subject to a fulsome consultation with specific proposed approaches set out upon which parties could comment. We note this is particularly true in relation to licensed spectrum, in which wireless service providers have made considerable investments in RAN equipment, mobile devices, and the spectrum licences themselves.

***D: ISED invites comments on the proposal to renew AWS-1 and G Block licences that have complied with their conditions of licence for a new term of 20 years, and I Block licences that have complied with their conditions of licence for a new term of 10 years.***

22. Eastlink does not have any comment on the G Block renewal period.

23. Eastlink supports the proposal to renewal AWS-1 spectrum licences for a period of 20 years. As the Department noted in the Consultation, a 20-year term is consistent with the term of recently awarded licences, and strengthens the incentive to invest in network infrastructure expansions by providing additional certainty around investment recovery.

24. Eastlink disagrees with the Department's proposal that the I Block licence term should be shorter than 20 years because it does not have a developed ecosystem. Eastlink submits that, if anything, the I Block licence term should be longer because it does not yet have a developed ecosystem. I Block licence holders invested in the spectrum licence based on the strong likelihood of renewal, non-binding deployment requirements, and the expectation that a 3GPP standard would be developed in due course. Where the licence is renewed (as we discussed in Paragraph 17 above), I Block licensees would then pay some still-to-be-determined spectrum licence fee during the licence term. It is only reasonable that I Block licence holders should have the time needed for the 3GPP standard to be developed, and then some time to deploy the spectrum, before the licence expires. Eastlink submits that the I Block licence term should be 20 years, as with the AWS-1 spectrum licences, in order for licensees to have an opportunity to benefit from the investment and future investments made in the I Block licences.

***E: ISED invites comments on the proposal to apply deployment levels at the Tier 4 population coverage level, within eight years of the new licence term, as described above and provided in Annex C, to the AWS-1 and G Block licences issued through the renewal process.***

25. Eastlink does not have any comment on G Block deployment requirements.

26. Eastlink disagrees with the proposed Tier 4 deployment requirements for the AWS-1 spectrum licences. As noted above, new entrants have faced considerable roadblocks to network deployment, particularly in more rural areas, including high wholesale roaming and tower sharing costs, lengthy delays in getting access to incumbent towers, and delays in getting new towers approved by certain municipalities. All of these challenges continue to impede infrastructure deployments and network expansions, and now exist in the context of considerable uncertainty with respect to mandated MVNO access.

27. The proposed Tier 4 requirements would not negatively impact incumbent service providers which have had decades to build their networks and already satisfy the requirements and/or have readily available access to existing infrastructure to deploy additional RAN equipment. For new entrants, the Tier 4 requirements would force new builds in very specific markets, redirecting resources from areas where we may currently have network expansions planned.

28. As described in Paragraph 11 above, Eastlink must execute our network deployment plan with careful consideration for the impact of high wholesale costs and other factors. The Department's proposed Tier 4 deployment targets would require Eastlink to build isolated markets, in some cases hundreds of kilometers apart, in a very short timeframe given the uncontrollable delays described herein. This massive build would not only inefficiently redirect resources from the rural communities where we are currently working to expand our network, but would be so economically burdensome that it would also redirect resources from multiple rural communities for each required Tier 4 build. This would result in more unserved or underserved areas continuing to lack access to competitive advanced wireless services and, therefore, would not serve the Department's policy objective of promoting rural deployment.

29. In addition, the Department's Tier 4 proposal imposes an arbitrary timeframe on spectrum use that may not coincide with operating realities. For example, in the event Eastlink decided to offer service in a particular Tier 4 community by 2026, we could do so with lower-band

spectrum (including the 600 MHz spectrum that new entrants require). Eastlink may not require AWS-1 spectrum to boost capacity in that Tier 4 community until 2036, depending on local wireless service use patterns. This could mean it would not be necessary to build our network to AWS-1 spacing (which requires more antenna sites than lower-band spectrum due to propagation characteristics) until well after the Department's proposed deadline, freeing up resources that could be directed to rural coverage expansions in other parts of the province or elsewhere in our licence areas.

30. Eastlink understands the Department's objective to have the spectrum used to serve all Canadians, but we submit that any new requirements must consider the operating realities of economically efficient deployment of spectrum, and the impact of high wholesale roaming and tower sharing rates, and unavoidable delays imposed by third-parties.
31. Eastlink supports the Department's alternative proposal to have all licenses built to Tier 3 levels in the AWS-1 band. As the Department stated in the Consultation, the Tier 3 approach would "foster competition and support ISED's objective to see the benefits of the spectrum usage in each service area, beyond large and medium population centres."

***F: ISED invites comments on whether or not the Tier 4 deployment option should apply to I Block licences issued through the renewal process.***

32. Eastlink submits that, as there is currently no equipment ecosystem for I Block licences and no parties have had an opportunity to deploy the spectrum, there is no need to change the deployment requirements from those originally established in Appendix C of the Licensing Framework. The original deployment targets were reasonable for entities just beginning to deploy a particular type of spectrum, and would continue to be reasonable for licensees who will begin to deploy a new type of spectrum – the I Block – once it has a standardized technical framework. The deployment standards should be required by the end of the new licence term, assuming the I Block is standardized under 3GPP with ample time to deploy before the end of the licence term.

***G: ISED invites other proposals for deployment requirements for the AWS-1, G Block and I Block licences issued through the renewal process.***

33. Eastlink does not have additional proposals at this time but may during the reply phase of this Consultation.

***H: ISED invites comments on the proposed conditions of licence for the AWS-1, G Block and I Block licences issued through the renewal process as set out in Annex A.***

34. As noted above, Eastlink submits that the I Block licence term should be 20 years and should be subject to the original deployment requirements set out in Appendix C of the Licensing Framework.

35. Eastlink supports the 20 year licence term for AWS-1 licences but does not support the Tier 4 deployment requirements, as detailed above.

36. Eastlink agrees with comments submitted by the CWTA on the issues of research and development spending and certain reporting requirements.

**Conclusion**

37. 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 next AWS-1 licence term.

38. We share the Department's intention of allowing rural Canadians to benefit from advanced wireless services. We submit that the Department should consider the economics of deploying infrastructure in rural areas, including high wholesale roaming and tower sharing rates, and the practical timelines of accessing existing infrastructure and/or deploying new sites, when establishing any new requirements for spectrum deployment. This consideration should be aimed at not inadvertently delaying network deployment to underserved or unserved areas, by inefficiently redirecting resources to satisfy licence conditions.

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