May 25th, 2007

Mr. Leonard St-Aubin,
Director General
Telecommunications Policy Branch
Industry Canada, 1612A,
300 Slater Street
Ottawa, Ontario K1A 0C8


Dear Mr. St-Aubin,

Please find attached the comments of Bragg Communications Inc., carrying on business as EastLink (“EastLink”) in response to Canada Gazette Notice DGTP-002-07.

EastLink believes that the Department should establish measures to enable new entry in the Canadian Wireless market. Further details regarding the measures we believe are required to achieve this objective are provided in the attached documentation.

We appreciate the opportunity to provide our views to the Department, and look forward to filing reply comments on June 27th.

Yours very truly,

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Lee Bragg
Co-CEO
EastLink

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1. Bragg Communications, carrying on business as EastLink (“EastLink”) is a Maritime owned and operated communications company offering cable television, local and long distance telephone and High Speed Internet services to residents and businesses in Nova Scotia, Prince Edward Island and parts of New Brunswick.

2. As a competitor to the incumbent telephone company in its territory, EastLink is an excellent example of the benefits that competition can bring to consumers. EastLink entered the local telephony markets under a regime established by the Canadian Radio-television and Telecommunications Commission (“CRTC”) that enhanced opportunities for new players to enter the market. EastLink credits the CRTC’s rulings, which were made in recognition of the Telecommunications Act policy objectives related to fostering competition in telecommunications markets, for providing an environment conducive for new entrants to compete in these markets.

3. EastLink believes that its presence as a competitor in these markets has not only increased choice for Maritime residents and businesses, but it has also played a significant role in increasing quality of services and products to consumers. EastLink was the first company to offer bundled services, which provides special pricing opportunities for consumers. Soon thereafter, the incumbent telephone company also began to offer bundles, as well as enhanced products, services and pricing. EastLink therefore supports Industry Canada establishing a spectrum management regime that includes measures to ensure new entrants have access to spectrum so they can enter wireless markets and provide similar benefits to the wireless marketplace.

4. EastLink hereby provides its comments on the Canada Gazette Notice DGTP-002-07, Consultation on a Framework to Auction Spectrum in the 2GHz Range including Advanced Wireless Services (the “Consultation Document”). Part II of the Consultation Document raises issues regarding the appropriate framework to apply for the AWS Spectrum Auction. EastLink addresses these issues below.

Section 2.7: The Need for Measures to Enable New Entry

5. EastLink submits that there is a need to implement measures in the upcoming AWS spectrum auction to enable market entry. Establishing conditions to enhance opportunities for entry at the auction stage is the most effective means for Industry Canada (“the Department”) to enable new entry into the wireless markets, thereby increasing wireless competition and ensuring that a maximum number of Canadians have timely access to the most recent developments in wireless technology and services.

6. Establishing the conditions outlined in this submission is consistent with the s.7 objectives of the Telecommunications Act, one of which is rendering reliable and

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1 Telecom Decision CRTC 97-8 – Local Competition, 1 May 1997
affordable telecom services of high quality accessible to Canadians in urban and rural areas in all regions in Canada. The Department recognizes the need for telecommunications policies and objectives to support a competitive Canadian telecommunications market, and that implementing measures may be appropriate in fulfilling these objectives. Recommendation 5-9(h) of the Telecom Policy Review Panel states:

5-9(h) Continued use of regulatory mechanisms such as spectrum caps (spectrum aggregation limits) where spectrum is scarce in order to provide an opportunity for new entrants to acquire spectrum and for Canadians to have an expanded choice of service providers.

7. As stated by the Department in the Consultation Document, the unavailability of spectrum constitutes a barrier to market entry. Incumbents have both the financial capacity and the incentive to prevent new market entry by either buying all available spectrum and/or all spectrum licenses for strategic locations, or by ensuring potential new entrants pay a sufficiently high premium for spectrum to seriously compromise their ability to succeed. As such, measures should be implemented to enable new entrants to access spectrum. The absence of specific measures will most likely prevent or limit new entry.

8. EastLink supports the proposal to set aside a specific amount of spectrum for new entrants. Proactively establishing measures for spectrum assignment to enhance opportunities for new entrants is in keeping with the objectives of the Federal Government as illustrated in the Telecommunications Act, as well as the Telecom Policy Review Panel Report. While opponents of this proposal may suggest that such actions are interventionist, EastLink submits that spectrum assignment is, by nature, interventionist. A review of Canada’s spectrum management history demonstrates that in past years spectrum was provided by way of grant. The 800 MHz Spectrum was granted by the Department in 1983 to corporate entities that became today’s incumbents; this is similar to the licensing process that led to the assignment of the PCS spectrum in December 1995. The proposal to set-aside spectrum appears to be less interventionist than the historical practice of direct grant.

9. EastLink submits that, on a balance of probabilities, the benefit of establishing measures to enhance opportunities for new entrants to acquire spectrum far outweighs the risks of doing so. Opponents of the proposal of establishing such measures will typically be the existing incumbents who have an interest in preventing access to new entrants. While incumbents may claim that such measures will promote uneconomic entry, there is a greater risk of no new entry if measures are not implemented. The benefit to be gained by providing new entrants with the opportunity to access spectrum far outweighs the risks of potential uneconomic entry. Furthermore, uneconomic entry will eventually be corrected through market forces.

10. Some reports illustrate that Canada’s wireless penetration rates are very low as compared to other countries and Canadians have access to fewer cellphone

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2 Consultation Document, s.2.2, page 14.
providers than our American counterparts, with prices being higher for the services.\(^3\) Notwithstanding that the incumbents may attempt to discredit these reports, the fact remains that there is significant room to improve wireless penetration and services in Canada. EastLink submits that increased competition is a sure means by which innovation, service levels, and wireless penetration will improve. Competition will only happen if the government implements measures to enable new market entry.

**Section 2.7.1: Spectrum Set-aside**

11. EastLink supports a spectrum set aside regime for new entrants. EastLink addresses the various issues raised in section 2.7.1 of the Consultation Document below.

**New Entrants**

12. EastLink is of the opinion that, given the regional nature of the licenses being auctioned, a new entrant should be defined as “a corporation, including subsidiaries, parent companies and affiliates, that does not own, rent or operate Cellular or PCS spectrum in areas served by a specific license”.

13. Current wireless companies with Cellular or PCS spectrum licenses should be permitted to bid as new entrants only in areas where they do not own, rent or operate such spectrum. A joint venture involving an incumbent should be allowed to participate as a new entrant only in areas where the incumbent does not own, rent or operate Cellular or PCS spectrum. Notwithstanding the foregoing, given their size, their financial capacity and their dominance over the Canadian Wireless market, Rogers, Bell, and Telus should not be treated as new entrants anywhere.

**Setting Aside Spectrum for New Entrants is in the Public Interest**

14. Competition is in the public interest. One of the key factors that drive penetration is reduced cost of services. EastLink submits that as new entrants enter the wireless marketplace it will drive prices down, resulting in increased penetration. Some reports indicate that penetration rates in Canada are much lower than in the US and that Canadians pay more on a per-minute basis for wireless services than their American counterparts.\(^4\)

15. In the interests of consumers and competition, new entrants must be able to acquire spectrum in order to enter wireless markets. Setting spectrum aside is the

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\(^4\) See footnote 3.
most efficient measure by which new entrants can acquire spectrum. Section 2.7 of the Consultation Document similarly recognized that creating an opportunity for new entry at the time of auction is, in many respects, the only time to introduce further competition to the wireless market.\textsuperscript{5}

16. Without spectrum there will be no new market entry. New entrants will not acquire spectrum if measures are not put in place. MVNOs and resellers are available to Canadian consumers, but these options are not as beneficial as pure facilities-based competition. There is little incentive for existing retail wireless providers to provide attractive MVNO offers that increase competition. As such, enabling new entrants to acquire spectrum is in the public interest.

The Amount of Spectrum to be Set Aside

17. Determining the amount of spectrum to be set-aside is not an easy task. A new entrant will require sufficient spectrum to provide service to a viable market share and to ensure that it is able to deliver a full range of services and applications.

18. In assessing the appropriate amount of spectrum to set aside, the Department must consider both the spectrum requirements to operate wireless networks and the future spectrum requirements for new services and technological evolution. The amount of spectrum held by incumbents today is also relevant to such an analysis.

19. Spectrum must be utilized as efficiently as possible and the Department must assign spectrum where it believes it is most needed. If the set-aside amount is too low, it will limit a new entrant's ability to compete. EastLink proposes that 20+20 MHz of spectrum be set aside. This is based on the need for at least 10+10 MHz for a mature voice market, plus an additional 10+10 MHz for data applications and services.

Spectrum Owned by Incumbents

20. EastLink submits that the incumbents own a significant amount of spectrum, which is more than sufficient to provide the services and applications necessary to operate an efficient multi-platform wireless network. The amount of spectrum EastLink submits should be set aside for new entrants is far less than that currently owned by the Incumbents, yet it is the minimum amount that would enable new entrants to have an opportunity to enter the market. The incumbents will not be prejudiced in any way by the set aside amount proposed.

21. Although the proposed set-aside amount of spectrum is less than what incumbents own or control today, such a set aside would allow new entrants to acquire a sufficient amount of spectrum in the short to medium term to efficiently deliver affordable voice and data services to Canadians subscribers.

\textsuperscript{5} See footnote 2.
22. Setting this amount aside would be in keeping with the historical treatment of spectrum⁶ and it would enhance opportunities for competitive entry, thereby benefiting consumers. The most efficient way to reserve spectrum allocation for a set aside is to use the tier 3 block identified as “C” and “D” in the Consultation Document. It is highly desirable that set-aside blocks are contiguous.

Set-aside Implementation and Conditions

23. EastLink recognizes that the objective of a set-aside is to increase competition, and not for new entrants to make profit selling acquired spectrum to incumbents or their affiliates. Therefore, EastLink submits that restrictions preventing new entrants from selling spectrum to incumbents for a period of five years post auction is appropriate. Alternatively, the Department may prefer to retain some flexibility and reserve the right to sanction or reject any transfer of spectrum ownership or spectrum operational rights from a new entrant to an incumbent (and/or its affiliates) in the first five years post auction.

24. The Department has always been flexible in accommodating operators’ needs in regards to divisibility of spectrum licenses once auctioned, granted or assigned. The TEL subdivision of tier 2 licenses to match the ILEC footprints is a good example of that. EastLink has no particular comments on divisibility of licenses.

Section 2.7.2: Spectrum Aggregation Limit

25. EastLink submits that establishing a set-aside is the most efficient means by which new entrants will be able to acquire spectrum. If the Department establishes spectrum aggregation limits, the limits should be used in conjunction with a set-aside regime, or it should follow the principles described below.

26. Given the number of incumbents in the Canadian wireless market and the structure of the AWS band plan proposed by the Department, a spectrum aggregation limit on incumbents for the AWS band would need to be very aggressive in order to meet the Department’s objective of enabling new market entry. EastLink submits that if an aggregation limit is set on AWS spectrum without a set-aside, the only limit on incumbents that would realistically enable new entrants to acquire sufficient spectrum to enter the markets would be a limit of 5+5 Mhz. Such a measure should apply for the first five years post auction.

27. Limiting incumbents to 5+5Mhz will allow new entrants sufficient capacity to offer a full range of services. If the aggregation limit were greater than 5+5Mhz it would provide an opportunity for incumbents to acquire spectrum such that the spectrum available to new entrants would prevent them from offering a full range of services. Therefore, if a spectrum aggregation limit is the only means used on the AWS

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⁶ A review of the history of wireless spectrum licensing in Canada indicates that the Department’s spectrum assignments have typically not provided a significant advantage to one party over another. The 1995 comparative licensing process left incumbents with a total of 17.5+17.5 MHz Cellular and PCS spectrum while new entrants owned 15+15 MHz, a difference of less than 15%.
spectrum to increase competition in the Canadian wireless market, 5+5 MHz is the only limit that would be effective.

28. For all the reasons discussed above, EastLink believes that a minimum of 20+20 MHz set-aside of AWS spectrum for new entrants or a spectrum aggregation limit of 5+5 MHz for incumbents in the AWS band would enhance opportunities for a competitive wireless market, consistent with the policy objectives referred to in the Consultation Document.

Section 3: Mandated Roaming

29. Incumbents have a significant advantage over new entrants given the extent of their wireless coverage. They have had a twenty-year head start in expanding their coverage to numerous areas across the country. On their respective websites, incumbents claim to reach more than 90% of the Canadian population and up to 95% in some markets.  

30. The Department’s efforts to provide spectrum for new entrants must be paired with access to roaming across the incumbents’ networks in order to ensure the survival of new entrants. Inability to provide roaming capability is a significant barrier to entry. Incumbents control the majority of the network across the country and, as such, they have the capacity to completely shut out new entrants by refusing to enter into roaming agreements, or by refusing to provide reasonable terms and conditions for such agreements.

31. Roaming was clearly recognized as a service critical requirement in the United States some seven years ago, when mandated roaming was incorporated into the United States Code of Federal Regulations, 47 CFR 20, Part 20.12 (c).  

Each carrier subject to this section must provide mobile radio service upon request to all subscribers in good standing to the services of any carrier subject to this section, including roammers, while such subscribers are located within any portion of the licensee’s licensed service area where facilities have been constructed and service to subscribers has commenced, if such subscribers are using mobile equipment that is technically compatible with the licensee’s base stations.

32. The above provision calls for technology neutral mandated roaming as long as the service is offered and the end user equipment is compatible with the service. The FCC rule applies to competing and non-competing carriers. Mandated roaming

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7 Rogers Wireless website claims its network reaches 94% of the Canadian population (http://www.shoprogers.com/store/wireless/coverage/info.asp ); MTS Allstream makes similar claims (http://www.mts.ca/portal/site/mts/menuitem.a275cbbc6dbb0d4e50e14081031248a0c/?vgnextoid=174f039b91c010VgnVCM1000000408120aRCRD&vgnextchannel=b1f437c75d20c010VgnVCM1000000408120aRCRD ); Bell Canada claims in a 2003 press release that, “To date, 95 per cent of the population within Bell Mobility’s serving territory can access wireless network service.” (http://www.bce.ca/en/news/releases/comspon/2003/12/23/70843.html )

8 This article is dated Nov 9th, 1999, last amended on Sept 29th, 2000.
has worked for over seven years in the U.S. and should be applied to the Canadian market.

33. The FCC recognized the importance of roaming in the Consultation document issued in 1996 that preceded the inclusion of mandated roaming in the Code of Federal Regulations:

   First, we conclude that the availability of roaming on broadband wireless networks is important to the development of nationwide, ubiquitous, and competitive wireless voice telecommunications, and that, during the period in which broadband personal communications services (PCS) systems are being built, market forces alone may not be sufficient to cause roaming to become widely available. Therefore, we expand the scope of our existing "manual" roaming rule, which requires cellular carriers to serve individual roamers, see 47 C.F.R. § 22.901, to include other CMRS providers that offer comparable competitive mobile telephony services. As a result of this action, cellular, broadband PCS, and certain specialized mobile radio (hereinafter "covered SMR") carriers must, as a condition of their licenses, provide service to any individual roamer whose handset is technically capable of accessing their network.

34. Mandated roaming remains critical to new entry. EastLink submits that the Department should mandate technology neutral roaming with the same restrictions found in the US, namely, service availability in a given area and technical compatibility of the end user device.

35. Mandated roaming should not be limited to specific frequency bands or services. It should be general and available as long the service is offered in the area and the end user device is compatible with the service.

36. EastLink submits that the Department should mandate service providers to negotiate roaming agreements in good faith on reasonable terms. Roaming should be made available within ninety days of one party making the request to another. If an agreement cannot be reached within ninety days, the Department should appoint an arbitrator to resolve the dispute. Establishing time limits with a dispute resolution mechanism would create incentives for parties to negotiate acceptable terms. EastLink also submits that service providers should not be entitled to grant other service providers or themselves an undue preference when negotiating such terms and conditions.

Section 4.1.1: AWS Band Plan & TDD technology in the AWS Spectrum

37. EastLink is in agreement with the AWS band plan proposed by the Department and believes that the operation of TDD equipment should be allowed as long as it meets the rules and restrictions set forth in the standards to be developed by the Department. With today's available filtering technology (including DSP) and Network features such as quality of service based power control, it should be possible for FDD and TDD technologies to co-exist in adjacent bands. Potential
difficulties or risk to address with the new standards are likely to come from site colocation of TDD and FDD technologies and possible interference between TDD and FDD mobiles operating in adjacent bands.

Section 4.1.2: 1670-1675 MHz Band Plan

38. EastLink is in agreement with the band plan proposed by the Department for 1670-1675 band. EastLink is also in agreement with the neutrality related to duplexing that the Department seeks to implement in Canada.

Section 4.1.3: PCS Expansion Band Plan

39. EastLink is in agreement with the band plan proposed by the Department for the PCS expansion band and agrees that the PCS standards should be applicable to this spectrum.

Section 4.2.1: Tier Sizes for AWS

40. EastLink is in agreement with the proposed tier sizes for AWS spectrum and agrees that the proposed tier sizes, paired with other conditions previously discussed, are suitable to allow new carriers in the market.

Section 4.2.2: Tier Size for PCS Expansion

41. EastLink is in agreement with the proposal of a Tier 2 service area for the PCS expansion spectrum.

Section 4.2.3: Tier Size for 1670-1675 MHz

42. EastLink is in agreement with the proposal of a Tier 2 service area for the 1670-1675 MHz band.

Section 4.4: Technical Considerations for AWS Systems

43. EastLink understands that processes described in section 4.3 and 4.4 of the Consultation Document regarding Co-channel/Adjacent Area and Adjacent Channel/Same Area Coordination have been successfully used by operators to mitigate problems in the Cellular & PCS bands. EastLink agrees that similar processes should be developed for the AWS spectrum, with special attention to potential interference between TDD and FDD systems.

Section 4.5: Sharing of AWS Systems with Other Services
44. EastLink acknowledges that, in the case of spectrum being newly assigned to Commercial Mobile Radio Systems, the Department needs to take measures to ensure incumbents’ fixed Microwave systems are protected for a certain transition period. EastLink agrees that mutually acceptable arrangements can be negotiated between parties within the provisions of the Spectrum Transition policy; such processes have been successfully implemented by the Department and used by operators in the past for other bands and therefore they should also apply to the AWS spectrum.

Section 5.3: License Term, Renewal and Implementation Requirements

45. EastLink proposes that the license term should be 15 years instead of 10 years. EastLink notes that in the U.S. a 15-year license term was provided for AWS licenses. The Consultation Document (s. 5.3) recognizes that the objective of a longer term will allow bidders greater certainty of the period in which they will be able to recover the costs associated with delivering services.

46. A 15-year term will provide more certainty in terms of the time within which new licensees will be able to establish the network and recover costs. A process can be established to ensure licensee compliance with license conditions before the end of the term. EastLink submits that there is little difference between a mid-term implementation requirement on a 15-year license and the submission of an application for an additional term at least two years before the end of a 10-year term.

47. Parameters required by the Department for the mid-term implementation requirements should be aligned with the conditions established in the Consultation document for license renewal. These include a description of the licensee service regarding geographic coverage and population served, a demonstration of the number of customers served by service area and a demonstration that the operator has met and continues to meet all license conditions. An average of 75% of the population covered within the entire territory licensed by an operator appears to be an acceptable mid-term implementation target for a 15-year license.

48. Renewal or mid-term implementation conditions should not be based on the number of subscribers. Instead, the service provider should provide proof that substantial effort has been made to market AWS services in its licensed areas.

49. EastLink generally agrees with the renewal expectancy provisions proposed by the Department. However, the mid-term implementation requirements discussed above should also apply to license renewal.

50. Should the department approve a 15-year term for AWS spectrum licenses, the renewal application would then take place at year 13 and the target for the average proportion of population covered in the licensed area could be increased to 85%. In the event the Department decides to proceed with the 10-year term proposed in the Consultation Document, the mid-term implementation requirements for the 15-year term, discussed above, should govern the renewal expectancy conditions.
51. Where a licensee does not fully meet the renewal expectancy requirements, EastLink submits that the Department should handle these issues on a case-by-case basis. Non-compliance issues would likewise need to be addressed on a case-by-case basis, given the potential range of non-compliant behaviour.

Section 5.4: Conditions of Licenses (Including Mandated Tower Sharing)

52. EastLink submits that the Department should mandate Canadian carriers to grant approval to share tower infrastructures within a reasonable timeframe when requested by a third party. Access to antennas and supporting structures is a significant barrier to entry into the wireless markets. A new entrant who has successfully obtained necessary spectrum will be severely limited in its ability to establish a service if it cannot access antennas and support structures on reasonable terms and conditions and within reasonable timeframes.

53. Incumbents will attempt to dismiss the need for mandated tower sharing on the basis that they have a co-location process established among them for the sharing of tower sites, and that the technical requirements such as antenna spacing, filtering requirements and impact on tower loading have all been established. They may claim that a significant proportion of existing wireless operators’ access sites are shared among two, and sometimes three, wireless carriers.

54. While there may be processes in place as between existing incumbents, they have little incentive to be as cooperative with new entrants. EastLink submits that incumbents should be required to authorize access to support structures within a reasonable timeframe so as not to delay a new entrant’s ability to offer service. To enable new market entry, as well as to limit the proliferation of antenna structures on the Canadian landscape, EastLink believes the Department should mandate tower sharing between wireless carriers and other third parties. These policies should include provisions related to mandated tower and site sharing.

55. Mandated tower sharing should ensure that the following principles are applied:

- Access should be provided on a first come, first served basis: the first co-location request received gets priority over subsequent requests from other parties;
- A mandated timeline of 90 days between request and access grant for construction (this includes correspondence to establish availability of antenna space, approval of requester’s engineering drawings and communication of access grant);
- The same technical constraints should be applied to all potential requesters (e.g.: isolation between antennas including space and frequency isolation, inter-modulation studies, structural reinforcement requirements, etc.);
- The reservation of space for future needs by the party owning the tower should be realistic and reasonable;
Tower operators should provide non-discriminatory terms and conditions to access their tower locations (i.e. one attaching party should not have preferential terms over another); and

- Exclusivity rights on leasehold agreements (roof top sites) should be lifted.

Section 5.5: Post Auction Licensing

56. EastLink is in agreement with all aspects of the proposed post-auction licensing process for AWS, PCS expansion and 1670-1675 MHz spectrum. Additionally, the Department could allow interested parties to buy unassigned licenses on a first come, first served basis after the auction process is complete.

Section 6: Opening Bids and Pre-auction Deposits

57. EastLink agrees with all provisions proposed by the Department related to opening bids and pre-auction deposits for AWS licenses.

Summary

58. EastLink wishes to thank the Department for the opportunity to offer comments on this proposed framework. EastLink supports a spectrum auction regime and post auction regime that recognizes the importance of increasing competition to wireless markets. Canadian consumers will certainly benefit from increased competition, through increased choice in service providers and through the enhancement in services, quality of service and reduced pricing that typically follows new entry.

59. EastLink submits that its proposals as outlined in this submission are a reasonable means by which the Department can ensure that new entrants not only have a viable opportunity to obtain sufficient spectrum with which to establish a competitive service, but also to access additional structures necessary to implement the service. By providing such means, the Department will thereby create an environment conducive to new entry, which could not otherwise occur. Upon entry, market forces will be engaged to correct unviable entry. On a balance, the benefits of approving the measures proposed herein far outweigh any perceived disadvantages to the incumbents, who will continue to own the majority of spectrum, nationally.

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