December 12, 2012

Manager, Emerging Networks
DGSO
Industry Canada
300 Slater Street
Ottawa, Ontario
K1A 0C8

RE: Canada Gazette Notice No. DGSO-006-12, Consultation on Renewal Process for 2300MHz and 3500MHz Licences

Chatham Internet Access appreciates the opportunity to provide comments on the Renewal Process for 2300MHz and 3500MHz Licences.

We are pleased to be able to offer our opinions regarding the renewal of spectrum licences and work with Industry Canada to assist in developing the wireless service provider industry in Canada.

Sincerely,

Wally Romansky
President
Comments of Chatham Internet Access

About CHATHAM INTERNET ACCESS (CIACCESS)

1. CIACCESS is one of the companies that is part of the MC Group of Companies. The companies in this group include:
   - MC Business Solutions
   - MicroAge
   - Chatham Internet Access
   - Express Copies and Printing
   - Standard Leasing Ltd.

   The MC Group of Companies provides business products and services to businesses in the Municipality of Chatham-Kent as well as Lambton and Essex Counties. Together, the MC Group of Companies employs 70 persons and operates out of five offices.

2. CIACCESS was founded in 1995 with the goal of providing Business Internet services to our current customers. Initially, dial-up service was offered and it became very popular in both businesses and residences.

3. In 2001, prior to DSL being available in our trading area, we rented space on the Municipality Water Towers and deployed wireless equipment to provide our business customers with High Speed Internet Access. We used Aironet radios in the 2.4GHz spectrum. This was very successful and our customers appreciated the 10Mbps, Up and Down service that our wireless system provided.

4. In 2004, we participated in the 2300/3500MHZ auction acquiring blocks in Chatham-Kent(4089d), Wallaceburg(4091d), and Sarnia (4092w).

5. CIACCESS was awarded a grant under the BRAND program, which helped launch our airNET service for the areas of Chatham-Kent, Wallaceburg, and Sarnia in 2004. This service was very well received in those areas and our customer base quickly expanded, enabling us to serve 98% of the Municipality of Chatham-Kent.

6. In 2009, CIACCESS was awarded a CONNECTING RURAL CANADIANS grant to assist in launching our WiMAX based wireless service,—airNET MAX. We are currently in the process of transitioning our customers from airNET to our new airNET MAX service, as well as adding new customers.
Industry Canada Mandate

7. It is clear that Industry Canada has a mandate to provide broadband coverage to the majority of Canadians.

8. Spectrum Policy Framework, Section 3.5 – Facilitating Communications in Rural and Remote Areas
There was general support for the provisions of the Framework that seek to facilitate access to communications in rural areas.

9. Broadband Canada
As part of Canada's Economic Action Plan, funding was provided to Industry Canada to develop and implement a strategy to extend broadband coverage. By far the biggest component of this strategy was the Broadband Canada: Connecting Rural Canadians program. Broadband Internet access is viewed as essential infrastructure for participating in today's economy, as it enables citizens, businesses and institutions to access information, services and opportunities that could otherwise be out of reach.

Challenges

10. One of the challenges in our wireless business is keeping up with the new technology and the speed demands that our customers are asking for. In order to increase speeds on our airNET MAX system we require more spectrum. If we had additional spectrum we could increase bandwidth on each sector from 3.5MHz to 7MHz to provide double the bandwidth to each subscriber and increase capacity at the same time. While we are adding sectors to maintain current speeds, we have nearly exhausted the available spectrum in our allotted 3.5GHz blocks. With each new sector that we install, we must be very careful not to interfere with one of our other towers because of the lack of spectrum.

11. I have talked with and written letters to Industry Canada numerous times to make them aware of this issue. We are hoping to acquire more spectrum, especially due to the fact that none of the other providers that bought spectrum in that 2004 auction have ever deployed anything in those ranges in our areas.

12. While Industry Canada allows these spectrum holders to sit on spectrum, our customers in Chatham-Kent and Wallaceburg have been suffering because CIACCESS's inability to acquire more spectrum has resulted in us being unable to either install more sectors or to turn up the radios to the highest speeds.
13. Using unlicenced spectrum is not feasible either as is becoming crowded and lower power levels restrict coverage range.

**Question 26-1:** Industry Canada seeks comments of the proposed wording of the condition of licence related to deployment. Comments are also sought on the following proposals that:

A. Deployment of fixed links not servicing an end user directly should be considered as an alternative method to meet WCS and FWA spectrum deployment licence conditions; and

B. When a requirement is considered for fixed links not servicing an end user directly, it should be set at 15 links per million population, per the Tier 4 area at the end of the licence term.

14. We do not believe that using fixed Point-to-Point links as a condition of appropriate spectrum use is acceptable. The spectrum blocks that we purchased each have a population of about 50,000. That means that, at 15 links per million, the owner of that licence would only need one point-to-point connection to fulfill that obligation. A spectrum holder could install one point-to-point link as a backup somewhere and fulfill their obligation, thereby holding onto the licence and keeping the spectrum away from their competitors who are looking to use that spectrum to offer higher speeds and more capacity to the areas they have been serving with wireless Internet for 11 years. This applies to both WCS and FWA bands.

15. Of the 172 Tier 4 areas, 127 could meet this requirement by deploying a single-point-to-point link, an additional 31 areas would meet this requirement by deploying 5 or less links. This policy could effectively tie up 92% of the spectrum in the Tier 4 areas with no benefit to Canadian End Users.

16. There are existing spectrum bands available for Point to Point Microwave systems with plenty of bandwidth to support this use. While a licence holder should be able to deploy Point to Point systems that compliment their Point to Multi-Point network, Point to Multi-Point should always be the primary use of this band and the basis of deployment licence conditions.

17. We believe that the obligation to the spectrum holder should be that the spectrum be used as it was originally intended – i.e. for Broadband Wireless Access. If a spectrum holder is not able to deploy that access in a reasonable amount of time (and I believe that 10 years has been more than reasonable), that spectrum should be made available to the spectrum holders that need it to expand or improve their current Broadband service offerings. If no other wireless providers providing Broadband service want the spectrum, then and only then, could it be used for point-to-point installations to fulfill that requirement.
**Question 71-2:** For the 2300MHz band, which of the two options is preferred?

**Question 71-3:** For the 3500MHz band, which of the two options is preferred?

18. We believe that Option 2, Issue Licences for New Term, is the appropriate choice for extending the licences for both bands for those licences that have met the original deployment conditions.

19. We think that 10 year terms are acceptable as long as timely reviews of deployment conditions are met. We support the ability to modify current licences to reflect the portion of the service area that has coverage. All unassigned subdivided licences to be returned to Industry Canada.

20. We agree that this option provides increased certainty, transparency and predictability for licencees. If you again offer a short extension, it penalizes the wireless providers who have deployed, where a lack of available spectrum is holding back any upgrades or expansion.

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**Question 71-4-A:** For Option 1 – Should Licence Terms be Extended?

21. We do not believe that a third extension should be granted for those spectrum holders who have not deployed in that spectrum. The licence holders that have already deployed should not be handcuffed by a lack of spectrum for an additional three years. Currently the licence holders who have not deployed are saying they need to wait for LTE equipment. There is plenty of equipment available for that band today; therefore we feel that waiting for LTE equipment is not a valid reason for not meeting deployment requirements. We do not support extending the terms of current licencees that have not met deployment requirements. Licences should be returned to Industry Canada at the end of the term.

That proposed extension poses another problem in that, within three years’ time new technology will most likely be available that is better and faster. That will provide those service providers sitting on licences to have an additional excuse to delay launching a service again. In the meantime, with each delay, many rural Canadian Internet users suffer from lack of service or speed. Many rural areas have been waiting for any service. Other areas are waiting for faster service.

Many potential providers have been sitting on the sidelines—sitting on valuable spectrum for 8 1/2 years, keeping it out of the hands of the more progressive rural wireless providers’ hands that have launched using the best available equipment. We believe that the extensions that have been
granted in the past have not served the rural Canadian population very well and those rural Canadians will once again be left behind if another extension is granted.

22. We do not support an extension under any circumstances.

**Question 71-4-B: Should the deployment requirement also be extended to the end of the proposed term?**

23. We do not support extending the licence term or deployment requirements. All licences that do not meet requirements by the end of their current term should be returned to Industry Canada.

**Question 71-4-C: In considering an extension of the licence term, do you expect equipment in the 2300 MHz band to become available soon enough to achieve the deployment requirements by December 2017?**

24. It is possible; however there are a couple of important attributes to this frequency band. First, relatively poor propagation characteristics will impact indoor coverage, an issue already quite visible in the 3G HSPA networks deployed in the 2.1GHz band. Second, poor propagation characteristics also translate into smaller cell radius – hence the need for more cells, which adds expense and complexity. Lastly and most importantly, frequency has a direct impact on network costs, as both OpEx and CapEx increase significantly with higher frequency.

25. There is however wireless Point-to-Multipoint systems available. We have been operating these very successfully for about five years.

**Question 71-4-D: In considering an extension of the licence term, do you expect LTE equipment in the 3500 MHz band to become available soon enough to achieve the deployment requirements by December 2017?**
26. Poor propagation characteristics make the 3500MHz band virtually useless for mobile applications. We do not see LTE equipment manufactures dedicating any resources to spectrum higher than 2400MHz.

Question 71-4-E: Are there any additional considerations that should be taken into account by Industry Canada?

27. A search if the Industry Canada Radio Equipment List (REL) for the band 3450-3650Mhz yields results of 146 models of certified radio equipment. There are plenty of choices for a provider if they are sincerely interested in deploying in 3500Mhz.

Question 71-5-A: For Option 2 – Is 10 Years the appropriate term for new licences issued through the renewal process?

28. Yes, however there should be timely reviews of the deployment conditions to ensure that spectrum is being utilized at all times. If a licence holder removes the equipment, then the licence should be returned to Industry Canada.

Question 71-5-B: For Option 2 – Should deployment requirements apply to new licences under the renewal process? If so, what should the deployment requirements be?

29. Deployment requirements should remain as issued in the original licence auction. Licences can be divided geographically to allow licence holders to meet requirements; unused licences should be returned to Industry Canada.

Question 71-6: Are there any other options for the licence renewal process that Industry Canada should consider?

30. We have no other options to consider.
Question 71-7: Industry Canada invites comments on the proposed wording of the condition of licence related to the licence term (detailed in section 8 of the consultation):

31. We have no comments on the wording of the condition of licence term.

Conclusion

32. Industry Canada has a mandate to facilitate the provision of Broadband Services to Canadian Residents. There is licensed spectrum available to meet this mandate, and there are companies ready to utilize the spectrum to deliver the services. Many Wireless Internet Service Providers have made investments in serving those rural areas and require additional spectrum to properly serve their current customers as well as expand to pick up new customers.

33. Over the last eight years, it has been apparent that many other providers are reluctant to provide wireless broadband infrastructure to the rural areas. Many licence holders have had 8 1/2 years to do something about providing those services, yet they have come up short.

34. Your decision should address the needs of the current providers who have already deployed. They have invested in infrastructure and in many cases they require additional spectrum to meet those needs. They can use this spectrum immediately to offer their customers faster speeds and provide better coverage. All other providers who have not deployed are only offering new promises. In my opinion, that promise was made 8 1/2 years ago and has not fulfilled, despite the fact that there is an abundance of wireless manufacturers in these bands.

35. In the near term, this may be one of the most efficient and impactful actions that Industry Canada can take to foster expansion of access to Rural Broadband.