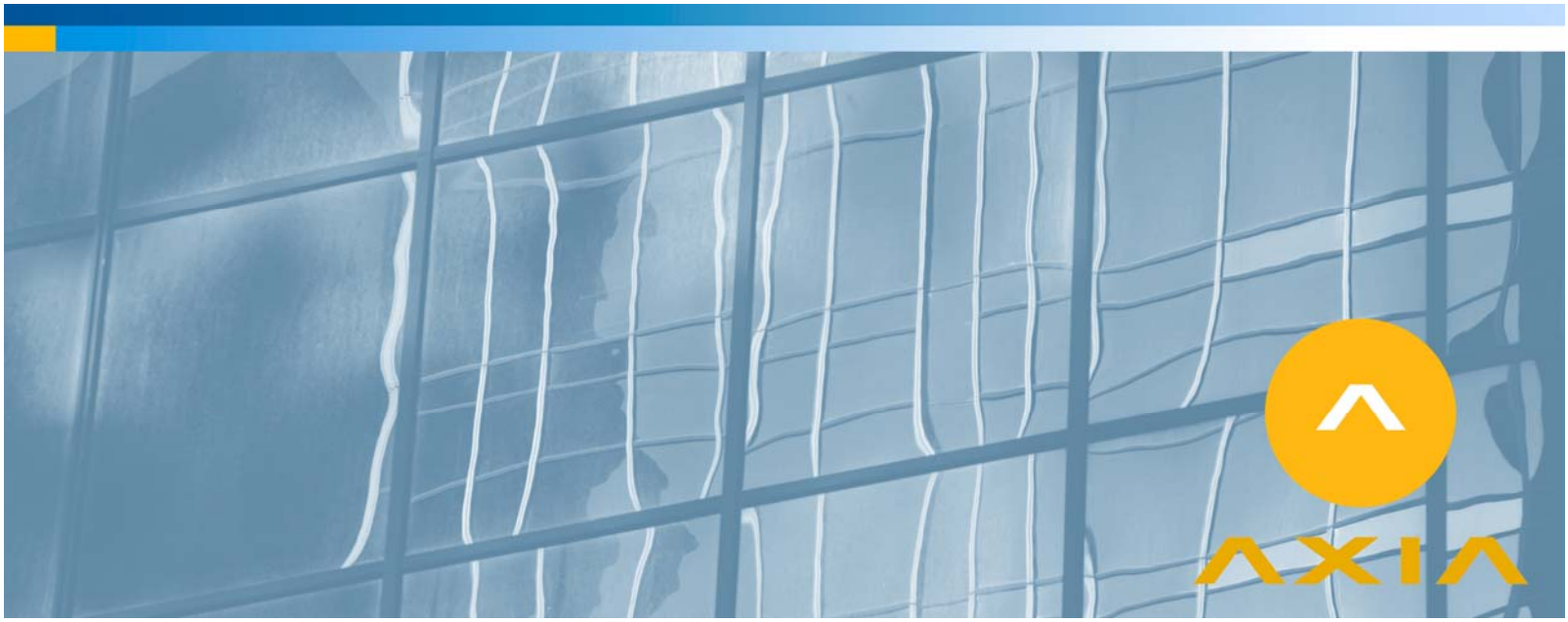

Axia NetMedia Corporation

Consultation on a Policy and Technical Framework for the 700 MHz Band and Aspects Related to Commercial Mobile Spectrum SMSE-018-10

Written by: Axia NetMedia Corporation

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Axia NetMedia provides the following comments in response to the Consultation on a Policy and Technical Framework for the 700 MHz Band and Aspects Related to Commercial Mobile Spectrum SMSE-018-10, dated November 30, 2010 and released in the Canada Gazette, Part I.

Axia's comments address certain specific questions raised by the Consultation paper which are especially critical to the needs of rural broadband users.

7-1. The Department seeks comments on the current state of competition and its anticipated evolution, including the impact on consumers in the Canadian wireless services market:

(a) in general;
(b) in terms of its contributions and interaction to the broader Canadian telecommunications service market;
(c) in comparison with the wireless markets of other jurisdictions.
Consultation on a Policy and Technical Framework for the 700 MHz Band and Aspects Related to Commercial Mobile Spectrum SMSE-018-1037

1. The state of competition in Canada's wireless service market can be characterised by its two distinct market areas; the urban centres and the rural areas.
2. Urban centres enjoy a level of competition not replicated in rural areas because the traditional economic models of a capital-intensive industry do not justify the investment necessary to deliver broadband outside the densely populated centres.
3. There are three key components to the economics of rural Broadband in Canada;
    a. Access to an un-conflicted, scalable and reliable backbone infrastructure;
    b. A uniform open access distribution infrastructure with equal access by any Service Provider;
    c. Available spectrum that stimulates competition.
4. Significant government support in the form of funding and policy programs has expanded network access in some select areas, but even with broadband infrastructure available, market forces are not able to succeed if appropriate spectrum is not available to smaller providers who compete in rural areas. In the context of the proposed 700 MHz auction and the digital divide in Canada, the economics of a regional or local service provider cannot compete in an auction with traditional carriers whose primary intent has been to provide services in areas with a high concentration of the population.
5. The purchase of spectrum by national carriers would exclude smaller regional and local providers from competing in rural markets. The medium to long-term effect of such a policy results in a reduced competitive base in the wireless services and fewer options for the consumer.
6. The Government of Canada has invested, and will continue to invest, in programs that extend the reach of broadband infrastructure into rural areas. If the spectrum ownership in these areas is such that regional or local providers cannot compete, the Government of Canada's investment in broadband policies will be greatly undermined.

7-3. In light of the current conditions in the Canadian wireless service market(s), is there a need for specific measures in the 700 MHz and/or 2500 MHz auction to increase or sustain competition?

7. Please also refer to our comments related to questions 7-1 and 8-1. The Government of Canada has the opportunity to stimulate competition outside of major centres by setting aside 700 MHz spectrum licences in to smaller regional or local providers or other entities that commit to deliver services in rural Canada within a specific timeframe.

7-5. If the Department determines that there is a need for measures to promote competition, which of the above mechanisms would be most appropriate and why should this mechanism be considered over the other? Comments should also indicate if further restrictions should apply so that policy objectives are met, for example, over a given time period?
In light of your response above, and recognizing that pending decisions on the specific band plan, spectrum for public safety system, tier sizes and open access requirements could influence your response:

8. The Department faces two choices with the auction of 700 Mhz spectrum;
    a. Force the national carriers to compete
    b. Not force the national carriers to compete
9. The Government of Canada has the opportunity to stimulate competition by insuring that the national carriers (ILEC and national Mobility companies) have to compete for customers in rural areas. Canadian consumer will be greatly affected if national carriers have exclusive use of the 700 MHz in areas where the population is not significant enough to cover the cost of competition.

7-6. (a) If the Department were to implement spectrum aggregation limits (caps):

(i) Should the cap apply to the 700 MHz band only or be broader?

10. Any cap should be applied across all the mobile broadband spectrum.

(ii) What should the size of the cap be?

11. In the rural areas, up to 100% of the available spectrum should be set-aside (capped) to only bidders that commit to reaching the highest portion of rural users.

(iii) Should bidders and their affiliates or associates share the cap?

12. Bidders, affiliates and associates should be allowed to share the cap, but must also be subject to the combined obligations.

(iv) How long should the cap remain in effect?

13. The cap should remain for the term of the license.

(b) If the Department were to implement a set-aside in the 700 MHz auction:

(i) Who should be entitled to bid in the set-aside block(s) and should the entitled bidders be restricted to bidding on the set-aside only?

14. For rural set-aside blocks, bidders should be allowed to bid only if their bid includes a bona-fide commitment to reach the highest percentage of rural customers. The reality is that, in rural Canada, there is not enough commercial justification to pay for spectrum to deliver rural broadband services. Industry Canada has an opportunity to take a different approach.
15. We propose that the rural set-aside auction be conducted in an entirely different manner. Rather than paying for spectrum (which is commercially un-tenable in rural Canada), each 'set-aside' bidder should be required to bid the following three performance parameters as their "bid":
    a. The percent of rural customers that will be reached.
    b. The average bandwidth available per rural customer.
    c. The cost of such service.
16. The spectrum should then be awarded based on the following:
    a. The highest percentage of rural customers served.
    b. The highest average bandwidth per rural customer.
    c. The lowest cost per rural customer.
17. Eligible bidders should be limited to those who will make the above commitments, and should explicitly include jurisdictional governments or other entities focussed on the public interest.
18. A further option should be made available in Alberta (and where any other provincial or regional governments declare interest). The Government of Alberta has taken a leadership position on solving the rural broadband issue through its Rural Broadband Initiative and therefore best positioned to leverage the 700 MHz spectrum for the benefit of rural Albertans.
19. In Alberta, the Government of Alberta or its agent, should be provided all the 700 MHz spectrum under a rural set-aside, at no cost to Government, provided that;
    a. The Government of Alberta does not in turn charge for it.
    b. The Government of Alberta makes it available in an open access model similar to that already in place for the Alberta SuperNet.
    c. The Government of Alberta seeks the widest possible rural coverage economically practical and agrees to give up the spectrum for any rural areas not eventually covered by some licensed service provider.
20. We note that active co-ordination of Government of Canada with the Government of Alberta rural initiatives can produce much more efficient and successful outcomes while reducing cost for all parties.

(ii) How much spectrum should be set-aside and which block(s) should be set-aside?

21. Up to 100% of the available spectrum in rural areas should be set aside in the manner we have proposed, except for that allocated to public safety.

8-1. In the above context, the Department seeks comments on challenges and specific problems affecting the deployment of broadband mobile services to low-density rural and remote areas.

22. Federal, Provincial and Municipal governments across Canada have implemented various programs to address the digital disparity between rural communities and urban centres. In Alberta, the Provincial Government set out to bridge the digital divide by supporting a provincial fibre grid that connects the communities where 85% of the population live.
23. Prior to the Alberta SuperNet only the 7 largest communities had access to broadband in the province. After the completion of the Alberta SuperNet in 2005, 429 communities had access to broadband and the competitive environment created by a non-conflict open access network created a market of 79 Service Providers competing for customers outside of the major centers.
24. As the Government of Canada reviews its options for the 700 MHz auction, it must consider that incremental costs in rural, low density areas are too high to amortize simplistically over the incremental market revenues. (yet rural communities are important for Canada's economy). Low population and business density in rural Canada creates a barrier to RSPs due to the inability to amortize costs over the potential client base.
25. The main strength of this spectrum is that it has significantly more range as typical mobile wireless frequencies and it has better penetration characteristics. The main drawback is that the bandwidth is somewhat limited, especially as compared to AWS and 3G. In fact, especially in the rural context, the 700 MHz band should be considered to be more effective for semi-mobile and semi-fixed applications, such as vehicle installations and residential access points. This is due to the larger antennas and power sources driven by the spectrum and the need to reach the more rural areas.
26. In rural Canada, the 700 MHz based wireless service would be optimally utilized as being complimentary to the existing WiFi/WiMax and 3G/4G wireless services targeted at customers out of WiFi/WiMax/3G/4G range. It should not be wasted trying to compete with mobility services or for short range services in competition with WiFi and WiMax.
27. The Government of Canada should consider a rural component of the 700 MHz spectrum that is planned to be made available to the private sector "set aside" that would allow the GOC to make the 700 MHz spectrum available to the independent WISP sector would commit to delivering services in rural areas within a certain timeframe. This approach would allow the independent sector to grow and compete by adding rural Canadians that live and work outside the towns and villages and major urban centres.
28. The above approach will enable the market to work and create competition and choice for end-users. They will choose the services that they need from the independent sector, the mobility sector and the incumbent for terrestrial services.
29. After implementing the above, the Government of Canada would then be able to assess any remaining gaps from a public policy perspective and choose any future course. The maximum would have been achieved by strategically using market forces.

9-1 The Department seeks comments on whether there is a need for government intervention to promote open access, by increasing access by users to handsets and/or applications.

30. Open access should be promoted by the separation of the delivery infrastructure from the applications and handsets. With a non-conflict, high-performance open access infrastructure available to any provider (including the incumbents), competing companies would invest in handsets and applications rather than infrastructure to meet the wants of the consumer.

9-2. If government intervention is needed, which of the following options should be implemented?

Option 1: Mandated open access requirements across all future commercial mobile bands
Option 2: Mandated open access requirements for the entire commercial mobile spectrum in the 700 MHz band.
Option 3: Mandated open access requirements for the "C Block" (746-757/776-787 MHz) as in the United States.

Please provide supporting arguments for your responses, and any additional comments related to provisions of open platforms for devices and applications.

31. We believe that Option 1 is in the best interests of the people of Canada.
32. Open access should become a cornerstone of all future commercial mobile bands. The spectrum is a public resource, and while organizations may compete for the right to use it – they should not be able to use that right to stifle or prevent innovation and fair and open competition.

10-1. The Department is considering three options to proceed with the 700 MHz and 2500 MHz bands auction processes:

Option 1: to conduct an auction for licences in the 700 MHz band first, followed by an auction for licences in the 2500 MHz band approximately one year later;

Option 2: to conduct an auction for licences in the 2500 MHz band first, followed by an auction for licences in the 700 MHz band approximately one year later;

Option 3: to conduct one combined auction for licences in both the 700 MHz and 2500 MHz bands, which would be six months later than the first auction in the case of separate auctions.

Industry Canada is seeking views on the merits or disadvantages of proceeding with each of the various options stated above. The Department seeks to understand the magnitude of interdependencies between the two bands from a business/operational perspective. Specifically,

comments are sought as to the extent spectrum in these bands is interchangeable or complementary from both a technological and a strategic perspective. In addition, views on the business and financial capabilities of participating in a joint auction for both bands are sought.

Comments should include the rationale for selecting one option rather than another.

33. Spectrum is a critical issue for rural Canada, and no additional delays should be incurred in releasing this spectrum. While it would be preferable to make both the 700 MHz and 2500 MHz spectrum available at the same time, this should not be at the expense of causing the auctions to be delayed. If such a delay is inevitable, then Option 1 would be preferable to bring broadband services to rural Canada as soon as possible.