



May 25, 2007

Director General,
Telecommunications Policy Branch
Industry Canada
1612A, 300 Slater Street
Ottawa, Ontario K1A 0C8

[submitted electronically: AWS@ic.gc.ca]

Re: Notice No. DGTP-002-07—Consultation on a Framework to Auction Spectrum in the 2 GHz Range including Advanced Wireless Services

On April 25, The Van Horne Institute and WiTec Alberta organized a one-day roundtable event in conjunction with the University of Calgary and the University of Alberta to discuss competition in the Canadian wireless industry.

The event was planned in response to Industry Canada's consultation on Advanced Wireless Services (AWS) as described in DGTP-002-07. Approximately 25 participants attended from various organizations including incumbent wireless service providers, wireless Internet service providers, users of wireless services, as well as academics and graduate students with an interest in this area.

This document presents key discussion points and related comments that were expressed by various participants during the course of the day. The roundtable was not intended to establish consensus or a common position among the stakeholders but instead was designed to encourage participants to articulate a wide range of views and exchange information on issues of importance.

The resulting discussion often went well beyond the specific questions posed in the Industry Canada discussion paper. It is our understanding, however, that the Department wishes to use this consultation opportunity to also consider long-term competition issues in the wireless industry. More specifically, DGTP-002-07 identifies a number of broad areas for comment, including:

... the current state of convergence in telecommunications and broadcasting, as well as mobile, fixed services and multimedia on the same infrastructure. Consideration of the broader context may also include the market forces and competitive characteristics currently found in this market as described above. Among other issues are the potential for market entry, the types of barriers to entry that such new entrants might encounter and whether spectrum incumbents have the incentive and means to acquire additional spectrum for the purpose of preventing access to prospective competitors. (p. 20)

In summarizing the remarks of the roundtable participants, we recognize that the substance of those comments sometimes extend beyond the specific questions related to the auctioning of AWS spectrum but do fall nonetheless within the broader areas mentioned above.

Summary comments reported in this document are organized according to various issues identified in DGTP-002-07, and we have tried to further categorize the results of the roundtable with specific questions asked by the Department in its consultation.

The list of participants to the event is included at the end of this document. However, as set out in the terms and conditions of the roundtable event, remarks in this report are not attributed to specific participants but instead are generalized according to the various positions and perspectives that emerged during the discussion.

The Van Horne Institute and WiTec Alberta wish to thank our participants for taking time to contribute to the roundtable event and to this report. We hope that this document will make a significant contribution to the Department's AWS consultation and to the discussion of wireless competition in Canada more generally.

Comments or questions pertaining to this report or to the roundtable event may be directed to Dr. Gordon Gow at the University of Alberta (ggow@ualberta.ca), tel: (780) 492-6111.

Spectrum Set-aside

The Department seeks comments as to whether a certain amount of spectrum should be set-aside for new entrants. Comments should include a precise description of those who should or should not be entitled to bid.

Participants were divided on the issue of set-asides. Some argued that such a measure would amount to a government subsidy at the expense of Canadian taxpayers and market dynamics and, therefore, that set-asides should not be permitted. Others claimed that in many cases it would be difficult or impossible for new entrants to compete financially with incumbents in an auction process for high value licenses and that a set-aside will be necessary to encourage new entrants. Several participants noted that a set-aside might be considered only for under-served areas to encourage new entrants in these markets but that high value service areas do not require set-asides due to the high level of competition that they claim already exists in these markets.

Comments should stipulate how such provisions would be in the public interest, and provide supporting evidence or rationale.

Other participants noted that they currently use licence-exempt spectrum to provide fixed wireless services to their customers but wish to acquire licensed spectrum in order to increase control over their operations and to provide higher quality of service to their customers, particularly in rural service areas. Some even stated that they have attempted to acquire fixed wireless spectrum in the secondary market but have been discouraged from doing so due to high prices. Several participants stated that certain bands are underutilized as a result of pricing and other restrictions imposed by current license holders. One participant characterized it as “a plethora of spectrum not being used” in certain bands, and that he/she was concerned that it was being held by speculators at the expense of the deployment of additional competitive wireless services. In response, some participants noted that the Department has requirements currently in place for the deployment of licensed spectrum and that such requirements are sufficient to ensure its use.

While no participant provided specific evidence to support the claims of underutilization, a number of parties around the table suggested that potential new entrants do experience real frustration in their efforts to acquire spectrum in secondary markets. In this respect, at least one participant suggested a set-aside be established for public sector bidders, such as municipalities, who might be seeking to acquire spectrum for internal, non-commercial services. Another suggestion was that set-asides might be made for private-public partnerships in under-served areas.

In response to these views, some participants expressed the view that licensing spectrum for less than the market value will encourage the inefficient use of this resource. It was further noted that public sector parties are required to pay the market value for all of the

other resources and assets that they require to operate and it would not be in the public interest to treat spectrum in a different manner.

Several participants, however, highlighted the need for public sector parties to meet certain critical infrastructure assurance requirements for business continuity. They expressed a concern that some public sector parties are not well served by current commercial wireless services, especially data services. The participants indicated further that capacity limits and high cost of wireless services were issues in this regard.

With regard to business continuity issues, one participant noted that commercial providers do offer wireless priority access provisions. This point was challenged by another participant who suggested that priority access provisions are not suited to protracted emergencies such as pandemics or large-scale disasters.

Several participants did not necessarily oppose the idea of set-asides for the public sector but indicated that it was not suitable for the forthcoming AWS auction, and that the Department should consider it an important but separate matter.

Comments are sought on the implementation of the set-aside post auction and the duration of any conditions of licence specific to the set-aside that may affect the licence such as divisibility and transferability.

With regard to the challenges of serving rural areas, one participant pointed out that licences for commercial wireless services are transferable and divisible, and that new entrants could negotiate with licence-holders for access to smaller or selected service areas that remain under-served. However, in response to this remark, several participants spoke about being “handicapped” or “handcuffed” in secondary markets by the various terms and conditions imposed by incumbent licence holders. It was suggested that new services could be deployed more quickly and more cost effectively if independent wireless providers were able to acquire their own spectrum.

Spectrum Aggregation Limit on Auctioned Spectrum

The Department seeks comments as to whether an auction spectrum aggregation limit should be placed on the amount of spectrum that can be acquired by a single wireless service provider and its affiliates. Comments should include the amount of spectrum for the auction spectrum aggregation limit, to which bands it should apply and the duration.

Generally speaking, participants were opposed to spectrum aggregation limits, indicating that it would hobble both incumbents and new entrants. Some regarded it as distorting the market and limiting the ability of incumbents to expand their current offerings to meet market demand and to deploy advanced wireless services. Others regarded such a limit as imposing constraints on new entrants who may require additional spectrum in order to compete against the existing assets of the incumbents.

On the other hand, some participants suggested that spectrum aggregation limit might be introduced on current licence-holders in service areas where that spectrum is identified as under-utilized. Such a measure would prevent licence-holders from acquiring additional spectrum in those service areas where they have yet to demonstrate adequate use of existing spectrum. In effect, this would permit only new entrants or active incumbents to bid on licenses for those service areas.

In response to this comment, another participant noted that new entrants with significant financial resources might be tempted to use such a situation to eliminate other new entrants in certain service areas, and that perhaps a two-tier limit might be a better approach. In this scenario, the Department would not permit incumbents to acquire additional spectrum in those service areas where current holdings remain under-utilized. At the same time, the Department would also limit the amount of spectrum that any new entrant might acquire in those same service areas.

Mandated Roaming

The Department invites comments on mandating mobile wireless operators to offer roaming services—to both competing and non-competing Canadian carriers—to foster the development of competitive wireless communication services.

A number of participants stated that voluntary measures for roaming were sufficient to ensure a competitive wireless market in Canada. These participants cited the existence of several mobile virtual network operators to suggest that a vibrant market in wireless services now exists and that this is a clear indication that voluntary arrangements at commercially acceptable rates are effective.

Some participants stated that mandated roaming presumes that the network is “a public service” that “every Canadian and Canadian business is entitled to that network.” According to these participants, such a presumption is incorrect and overlooks the right of private investors to control access to that infrastructure and that commercial mobile networks have been built at considerable risk, with no guaranteed rate of return.

Comments are invited on the extent to which the lack of mandated roaming could be a barrier to entry into the wireless market.

Following the above point concerning private rights of access to wireless facilities, a brief discussion among participants raised in general the issue of the public interest in wireless networks and more specifically, the need to ensure equitable access to certain facilities in order to sustain a competitive marketplace. A number of participants expressed the view that the Department should not mandate roaming, but at the same time, should provide some oversight to ensure “a fair economical rate” for access to certain facilities to encourage new entrants in the wireless market.

Some participants indicated that roaming poses a significant barrier to new entrants because access to the last-mile is essential for the mobility of their customers. One participant suggested that rates might be capped or regulated to remove the temptation for incumbents to refuse to negotiate on fair terms and conditions.

Comments are sought on the mechanisms that would best implement the policy objectives regarding roaming.

As noted in the consultation paper (p. 24), the Department considers it important that “all networks be fully integrated into the national telecommunications networks” and has previously issued a statement to that effect by encouraging the existing carriers to offer roaming to non-competing carriers.

Many roundtable participants recognized the importance of roaming to potential new entrants. Incumbent wireless carriers at the roundtable were, however, opposed to mandated roaming on the grounds that it would distort competition in the marketplace and act as a disincentive for new entrants to deploy infrastructure of their own.

Several participants suggested that the Department could require that incumbents enter into negotiation with new entrants in order to provide some assurance that roaming provisions will be made available at a fair market price and on reasonable terms and conditions. One participant noted that such conditions were not unlike the resale requirements attached to the PCS licences awarded in 1995.

The general consensus among these several participants was that without such assurances on access to roaming, many new entrants will be discouraged from bidding on spectrum altogether because they believe that incumbents could refuse to negotiate with them on fair terms and conditions.

Some participants further suggested that if mandated roaming were to be introduced by the Department that it be tied to a condition of licence that would require new entrants to meet facilities deployment requirements as set by the Department. In the view of these participants, such a trade-off would ensure that mandate roaming served only as a temporary measure to support the Department's objective to encourage facilities-based competition in the wireless market.

Participants also discussed the issue of mandated tower sharing during the roundtable. Some participants held a similar view to that of mandated roaming, inasmuch as they believe that current voluntary arrangements for tower sharing work well. Some claimed that mandated tower sharing could in fact lead to artificial inefficiencies and inflated costs, particularly in cases where existing towers may need to be modified to accommodate sharing when multiple towers might be more cost effective.

One participant, however, noted the need for tower sharing in certain areas to remove barriers for new entrants in the wireless market. Other participants suggested that there is significant public concern with the negative aesthetic impact of a growing number of towers now visible in both urban and rural areas. As such, it was suggested by some participants that the Department's policy on tower sharing should address these concerns on a going forward basis, particularly if new entrants are to be encouraged in the wireless market.

Service Areas

Comments are sought on whether the block and tier sizes given above will allow the entry of new carriers in the market.

Participants did not comment specifically on the proposed blocks and tiers identified in DGTP-002-07, but several did indicate that they are not well served by the service areas currently used by the Department for spectrum auctions.

More specifically, these participants described the problem of “grey zones” located at the margins of high value service areas—such as rural communities that lie on the outskirts of major urban centres. These communities may be under-served or slow to receive service from large wireless carriers who can afford to acquire licenses in high value service areas. The example of Calgary and its surrounding areas was offered by one participant as a case in point, where incumbent providers bid up the price of licenses for this area and concentrate service deployment in the urban centre at the expense of providing service to the surrounding communities.

Some participants regard these surrounding communities as a viable market for new entrants and suggested that the Department reconsider its service area definitions to make it more affordable for potential new entrants to bid on spectrum for these grey zones. Along these lines, another participant introduced the term “granularity,” suggesting that the Department might consider defining its service areas in a more precise manner to account for communities located on the fringe of major urban centres.

The participant also indicated that grey zones may exist particularly along service “corridors” such as the one that connects Edmonton, Red Deer, and Calgary. In this case certain service areas might be valued for their proximity to a major highway yet communities lying within the service areas but just beyond the corridor might remain under-served by the licence holders.

It was noted that by redefining its service areas along the lines of this more “granulated” geographic approach, the Department might obviate the need for set-asides in the spectrum auction because it would increase the likelihood that bids for spectrum in these grey zones would correspond more closely with their fair market value.

Licence Term, Renewal and Implementation Requirements

Comments are sought on the licence term, implementation and renewal proposals.

Participants expressed mixed views on licence term and implementation requirements. One stated that the Department should follow the precedent set in the United States and extend the term to 15 years with no deployment requirement. This view held that deployment requirements were unnecessary given a licence-holder's economic incentive to recoup any significant investment in spectrum.

Most other participants expressed a different view, however, indicating that some form of implementation requirement was probably desirable to ensure that the public interest is met through the timely deployment of new competitive wireless services. Among this group, one participant suggested that phased deployment requirements might be introduced for new entrants – especially if the Department were to introduce mandated roaming or mandated tower access.

The supply of fixed wireless equipment was also mentioned as a constraining factor on certain licence-holders. In particular, one participant noted that they are continuing to wait on vendors to supply equipment for certain wireless broadband services.

One participant pointed to the opportunities for Canadian-led innovation if implementation requirements were to support a more competitive market in wireless equipment and services. Another participant suggested that consumer demand for wireless services, particularly in rural and remote areas, might be stimulated further by measures intended to ensure timely implementation of advanced services within those communities.

Summary

The roundtable event was an opportunity for various stakeholders to express views and share ideas about competition in Canada's wireless industry. While consensus was not the aim of the event, a number of salient points did emerge out of the discussion.

- Participants noted a rural/urban split in concerns about barriers to entry in the wireless industry, with rural service providers seeing themselves at a competitive disadvantage.
- Some participants feel that set-asides will negatively impact the market for spectrum and are unnecessary with respect to the current level of competition in the wireless market. Other participants, however, suggested that limited set-asides under specific terms and conditions might encourage new entrants in competitive wireless services for under-served areas.
- As an alternative to set-asides, some participants suggested that a redefinition of the Department's service areas might address barriers to entry through more appropriate pricing for spectrum in the grey zones outlying urban centres.
- Mandated roaming was largely opposed by participants but some indicated that new entrants would be encouraged if the Department were to ensure that incumbents negotiate roaming arrangements on fair terms and conditions.
- Mandated tower sharing was opposed by some participants while others noted public concern with the growing number of towers on the landscape. One participant saw a need for the Department to enact policy to ensure fair terms and conditions for access to towers in order to encourage new entrants in the wireless market.
- Many participants supported the idea that the Department should maintain implementation requirements for licensees. Some noted that the supply of wireless equipment might pose a barrier to service deployment and that the Department should take this into account in conjunction with other measures intended to expand competition in the wireless industry.

List of Participants

Axia Netmedia	Wayne Johnston
Barrett Xplore (Alberta Wireless Association)	Bill Macdonald
Bell Canada	Jack Janssen
Bell Mobility	Rick Bruce
City of Calgary	Brian Hayes
City of Calgary	Emmanuel Chick
Enmax Envision	Erwin Kantweg
IPPlus Wireless	Richard Ducharme
MyCanopy	Brant Jeffery
Rigstar/Fat Banana	Dan Grisdale
Rogers	Robert Gerrity
Rogers	Joel Thorp
TELUS	Dave Cunningham
TELUS	Richard Prior
University of Alberta	Marco Adria
University of Alberta	Gordon Gow
University of Calgary	Richard Hawking
University of Calgary	Linda Vennard
University of Calgary, The Van Horne Institute	David Mitchell
The Van Horne Institute	Sarah Ingram
Vidéotron Ltd.	Marie-Ginette Lepage
Wiband Communications	Curtis Albrecht
WiTec Alberta	Richard Belzil