



June 15, 2009 - *Filed electronically*

Peter Hill  
Director  
Industry Canada  
Spectrum Management Operations  
300 Slater Street  
Ottawa, Ontario K1A 0C8

Dear Mr. Hill,

**RE: Canada Gazette Notice DGRB-001-09 - Consultation on Revisions to the Framework for Spectrum Auctions in Canada**

The Canadian Wireless Telecommunications Association (CWTA) is pleased to provide comments in response to Canada Gazette Notice DGRB-001-09 - *Consultation on Revisions to the Framework for Spectrum Auctions in Canada* ("the Consultation"). CWTA supports the Department's intent to update the 2001 Framework.

CWTA is the authority on wireless issues, developments and trends in Canada. It represents cellular, PCS, messaging, mobile radio, fixed wireless and mobile satellite carriers as well as companies that develop and produce products and services for the industry.

CWTA also submitted comments in response to Canada Gazette Notice DGRB-002-09 - *Consultation on the Renewal of Cellular and Personal Communications Services (PCS) Spectrum Licences*. In CWTA's view, the sequencing of these two important consultations has added unnecessary complications to the process.

Had the broad policy issues contained in the *Consultation on Revisions to the Framework for Spectrum Auctions* been addressed and resolved, and then the application of the policy to the cellular/PCS licences would be much more straightforward. This concern also applies to the renewal of the 24 and 38 GHz licences and the manner in which the Department introduced the Vickrey auction for air to ground services.

The following are CWTA's detailed comments regarding the issues outlined in the Consultation.

***Comments are sought on the various types of spectrum auctions and auction formats to be used by the Department as well as the circumstances under which a particular format or attribute should or should not be applied.***

The choice of auction type and design is a highly technical and complicated task that can have a profound impact on licencees. CWTA does not offer any comment on the types of auctions the Department should use.

CWTA is concerned, however, with the manner in which the Vickrey auction was employed in the auction for air-ground services in the bands 849-851 MHz and 894-896 MHz – without even acknowledging that the Spectrum Auction Framework did not provide any option to use any format other than a simultaneous ascending auction. The industry relies on regulatory certainty to establish business plans and make investments. If the Department is willing to disregard its own policy documents, it raises the specter of doubt and may impair investment.

CWTA encourages the Department to carefully consider the submissions of the Association's individual members.

***Comments are sought on the Department using auctions to select those to whom a satellite authorization will be issued.***

CWTA supports the use of auctions for assigning satellite authorizations, as this approach would be consistent with the *Spectrum Policy Framework* guideline to rely on market forces “to the maximum extent feasible.”<sup>1</sup>

In this respect, CWTA notes that the Department has focused its use and application of economic principles almost exclusively to the mobile wireless industry. Further, the application of economic principles has by and large been limited to extracting funds from licencees. This continued pursuit of economic rents from one segment of the gamut of spectrum users effectively discriminates against those licencees and their customers.

CWTA urges the Department to ensure that economic principles are applied equitably to all commercial spectrum users. The report *Study of Market-based Exclusive Spectrum Rights*<sup>2</sup>, prepared for the Department, provides an overview of the significant advancements in spectrum policy and the application of economic principles that have occurred internationally and recommends that the Department “accelerate the pace of reform of spectrum management in Canada”.

The report also provides a roadmap to implementing a system of spectrum trading and market-based exclusive spectrum rights that would apply to all commercial and public sector spectrum users. CWTA requests the department commence a consultation on these recommendations.

***Comments are sought on all issues relating to the Department's proposal regarding the renewal process for long-term licences, including:***

- ***that licences continue to have a high expectation of renewal;***

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<sup>1</sup> DGTP-001-07 - Spectrum Policy Framework for Canada

<sup>2</sup> *Study of Market-based Exclusive Spectrum Rights*, McLean Foster & Co., in collaboration with Prof. Martin Cave, Robert W. Jones and Dr. William Lehr for Industry Canada, 2007

- *that licences continue to be issued for 10-year terms;*
- *that the conditions of licence applied to the renewed licences may differ from those on the existing licences, with such changes being made following a consultation; and*
- *that fees be imposed for renewed licences and be based on an estimation of the market value of the spectrum.*

CWTA believes the statement “high expectation of renewal” is a very important indicator of certainty for licencees and requests the inclusion of the phrase “high expectation of renewal” in both the text of policy documents and conditions placed on spectrum licences.

The use of standard and consistent language with respect to the likelihood of renewal will promote the long-term certainty that characterizes a stable investment climate. The importance of this certainty cannot be understated. Wireless operators have billions of dollars invested in networks, and have plans for continued investments into the future. Furthermore, nearly two-thirds of Canadians subscribe to wireless service.

In order to confidently invest in these networks, and to assure subscribers of a future service, licencees require certainty and predictability. CWTA submits that the Department should further enhance this certainty by extending the terms applied to auction licences.

The Department has proposed to maintain the use of 10 year terms for auction licences. CWTA considers that 10 years should be a minimum for licence terms and submits that the Department should follow the lead of other jurisdictions by issuing licences for longer terms.

Longer terms help bolster operator and investor confidence and are intended to encourage investment. This confidence can result in increased use of and build out of the spectrum and promote innovation. The Department has recognized this international trend on a number of occasions.

...there has been a trend towards longer licence terms in a number of countries to provide greater investment certainty. For example, Guatemala, France and Australia provide 15-year terms. The United Kingdom provides 20-year terms for 3G licences and New Zealand provides 20-year terms for cellular spectrum rights.<sup>3</sup>

Longer and indefinite licence terms are generally viewed as providing a more stable investment climate for licensees recognizing the initial investment in spectrum licences and the need to establish networks and recover costs.<sup>4</sup>

In the United Kingdom, Ofcom has introduced indefinite licence terms for its auctioned spectrum but retains the power to revoke licences where overriding reasons of spectrum management require it to do so<sup>5</sup>

<sup>3</sup> Gazette Notice - DGRB-001-08 - Consultation on the Renewal of 24 and 38 GHz Spectrum Licences and Spectrum Licence Fees for 24, 28 and 38 GHz Bands, Section 4.1

<sup>4</sup> Gazette Notice - DGRB-001-08 - Consultation on the Renewal of 24 and 38 GHz Spectrum Licences and Spectrum Licence Fees for 24, 28 and 38 GHz Bands, Section 4.1

<sup>5</sup> Gazette Notice DGRB-001-09 – Consultation on Revisions to the Framework for Spectrum Auctions in Canada, Section 5.1

.../...

CWTA recognizes that even with a longer-term or indefinite licence, that there may be overriding spectrum management reasons to modify or remove a licence. These longer terms would not in any way prevent the Minister from revoking a licence if the terms or conditions of licence have been contravened, or where an authorization was obtained through misrepresentation or for non-payment of fees. The Minister would also retain the ability to modify the terms or conditions of a licence during a term.

If the Department is concerned that the *Radiocommunication Act* or the *Radiocommunication Regulations* do not provide sufficient authority to act or to revoke a licence for spectrum management reasons during the term of a licence, then CWTA submits that the necessary legislative or regulatory changes should be pursued.

The Consultation states that the Department's objective in establishing fees for spectrum authorizations is to "promote efficient assignment of resources" and "earn a fair return for the Canadian public". The Consultation cites the *Department of Industry Act* and the *User Fees Act* as establishing the Department's authority to set fees and outlining the requirements for the setting of new and amended fee. CWTA notes that neither of these statutory instruments directs the Department to earn a fair return for the Canadian public.

For more than a decade the Department's auction policies have indicated that the question of whether or not renewal fees would be applied was a matter for consultation, and was to be determined. These statements are included in the two issues of the Framework for Spectrum Auctions in Canada, and the Policy and Licencing documents for the auctions of spectrum in the 24&38 GHz, 2 GHz (PCS), 2300&3500 MHz, and 2 GHz (AWS) bands.

CWTA expected the Department to consider: first, whether or not renewal fees would be applied; second, if fees were to be applied, would they be cost-recovery or economic rent-seeking; and third, what fee should be proposed. In the present consultation the Department has determined that it will forgo the question of whether or not renewal fees should be applied. It has also determined that and that it will propose a fee that will be based on the "market value" of the spectrum measured in terms of economic rent.

Despite the fact that the Department has clearly stated its intention to impose fees that reflect "a fair return to the Canadian public" and extract economic rents, it is not clear that those economic rents exist. With the high expectation of renewal associated with auction licences, and the long time horizons for network deployment and return on investment, it is reasonable to conclude that the auction purchase price includes all the economic rents associated with the licence. Certainly it is clear that the Department has not evaluated this scenario. CWTA submits that for auction licences, any renewal fees, if applied, should be based strictly on recovering the Department's costs in managing the spectrum.

If the Department is intent on establishing fees based on the market value of spectrum, CWTA notes that there is a significant distinction between the market value of spectrum, and a fair return to the public. While the market value would represent the benefit accruing to the licensee for access to and use of the spectrum, the fair return to the public would also include the benefits accruing to the public from the availability of the services using the spectrum. The 2007 SPF states

that the Department's policy objective is to maximize the economic and social benefits that Canadians derive from the use of the radio frequency spectrum resource.

CWTA submits that the Department should thoroughly examine all public and private benefits associated with the licences prior to setting any market based fees. The Federal government has consistently and repeatedly stressed the importance of telecommunications for Canadians. The objectives of the *Telecommunications Act* and the *Radiocommunication Act* aim to achieve widely deployed, affordable and reliable telecommunications infrastructure. These objectives are in place specifically because of the public benefits derived from the availability of telecommunications.

CWTA strongly believes that the public benefits arising from the use of the radio spectrum resource are substantial. Specifically, mobile wireless service provides significant benefits to the Canadian public. The Department has recognized this as well. The 2007 SPF noted "The wireless telecommunications sector plays an important role in the Canadian economy"<sup>6</sup>. Today more than 21.6 million Canadians use cellular/PCS devices on a daily basis, representing more than half of all connections to the PSTN. Canada's wireless industry makes important direct contributions to the Canadian economy and is an enabling technology for many other sectors of the economy.

The United Kingdom's Ofcom, and its predecessor, the Radiocommunications Agency have studied the economic impact of the use of radio spectrum on several occasions<sup>7</sup>. In 2006, it was estimated that economic benefit arising from the use of the radio spectrum of £42 billion in 2005/6<sup>8</sup>. Studies of the United States wireless industry have estimated the consumer surplus for commercial mobile services at \$81 billion<sup>9</sup> and \$157 billion<sup>10</sup>.

CWTA submits that all of the public benefits of wireless services need to be adequately measured and taken into account as the Department establishes any fee for auction licence renewals.

***Comments are sought on the continued need for the condition of licence requiring that licensees invest a percentage of their adjusted gross revenues in R&D.***

CWTA is of the view that the Research and Development condition is an artifact from a previous era that is no longer appropriate or required. It originated out of an expressed preference for Research and Development commitments contained in the original cellular licencing process. The condition was intended to encourage the growth of Canada's domestic wireless telecommunications equipment, software, and services sectors, in what was at the time a nascent industry. The vibrant and growing wireless clusters that have since developed in Calgary, Montreal, Ottawa, Toronto, Waterloo and Vancouver demonstrate there is no longer a need for this artificial inducement.

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<sup>6</sup> DGTP-001-07 – New Spectrum Policy Framework for Canada, p. 1

<sup>7</sup> See for example, *The Economic Impact of Radio*, Radiocommunications Agency 2001; *The Impact of Radio*, Radiocommunications Agency, 2002 Update; *Economic impact of the use of radio spectrum in the UK*, by Europe Economics for Ofcom, 2006

<sup>8</sup> ; *Economic impact of the use of radio spectrum in the UK*, by Europe Economics for Ofcom, 2006

<sup>9</sup> *Advanced Wireless Services, Spectrum Sharing, and the Economics of an Interference Temperature*, Thomas W. Hazlett and Matthew L Spitzer, 2004

<sup>10</sup> *The Impact of the US Wireless Telecom Industry on the US Economy*, Ovum for CTIA, 2005

As a result of this condition, more than a billion dollars invested since the first licences were issued. As the Department notes in the *Consultation on Revisions to the Framework for Spectrum Auctions*, wireless companies invest in research to remain competitive, and have generally exceeded the amount required by the condition of licence.

This condition adds a financial and administrative burden on licencees and suppresses network investment. Consumer demand for voice and data services is putting considerable pressure on the capacity of wireless networks. This is in turn driving significant investments in the capacity and speed of wireless networks. Given the current economic climate, and the government's desire to make investments to stimulate the economy, licencees should be provided maximum flexibility to invest all available resources as they choose.

To CWTA's knowledge, no other jurisdiction applies a comparable obligation. The Department has alternatives for encouraging R&D in Canada and, as the Consultation notes, the

*Telecommunications Policy Review Panel Final Report* and the *OECD Telecommunication Regulatory Institutional Structures and Responsibilities* have cautioned against the mix of regulation and industrial development strategy.

For all these reasons, CWTA recommends the Department discontinue this condition.

***Comments are sought on the establishment of a new Tier level that would differentiate urban and rural areas or whether other mechanisms could achieve the same purpose more effectively.***

CWTA is aware that some parties have advocated for changes to licencing policies, including modifying the service areas used for competitive licencing. The stated intent of these changes is to facilitate the business plans of companies interested in serving rural areas. As the Consultation notes, the fixed service bands have in the past licences that were differentiated between urban and rural areas. Significantly, the Consultation also notes that "The preference of where the lines should be drawn **differs depending on the business case** (emphasis added)."

Spectrum auctions were introduced to move the Department away from command and control, bureaucratic spectrum management regime towards an efficient, transparent system that provides flexibility and relies on market forces. This objective to rely on market forces is now entrenched in the SPF. CWTA submits that the changes to the service areas as discussed are the antithesis of reliance on market forces. This type of action would be a step in the wrong direction. CWTA submits the Department should not be considering policy changes in order to support a particular business case over another.

There are existing mechanisms for other interested parties to obtain spectrum in unserved and underserved areas of the country. Secondary markets are available, including the use of spectrum licence transfers and subordinate licencing agreements. As previously submitted, the Department has received recommendations for expanding these secondary markets and the implementation of Spectrum Trading and market-based Exclusive Spectrum Rights in Canada. CWTA submits that the Department should focus on pursuing these recommendations, rather than meddling in the details of spectrum licences.

If the business case for services in certain rural and remote areas warrant government support, than that should come in the form of direct funding available to any licensee.

## Conclusion

CWTA supports the Department's intent to update the 2001 Spectrum Auction Framework. In order for licensees to fully benefit from the renewed framework, CWTA recommends the Department ensure and enhance certainty for licensees, create an appropriate fee and licencing regime, and continue to advance the application of economic principles by:

- applying a "high expectation of renewal" using a standard and consistent language;
- undertaking the necessary actions to apply longer licence terms;
- discontinuing the Research and Development Condition of Licence; and
- applying a cost-recovery fee for licence renewals
- commencing a consultation on the recommendations of the *Study of Market-based Exclusive Spectrum Rights*.

Sincerely,



J. David Farnes  
Vice President,  
Industry and Regulatory Affairs