

2004-03-01

Mr. Larry Shaw  
Director General  
Telecommunications Policy Branch  
Industry Canada  
300 Slater Street  
Ottawa, Ontario K1A 0C8

Dear Mr. Shaw

**Re: Consultation on the Spectrum for Advanced Wireless Services and  
Review of the Mobile Spectrum Cap Policy**

The Canadian Wireless Telecommunications Association is pleased to provide the attached response to the above noted consultation.

CWTA is encouraged that the Department is moving to ensure an adequate long-term supply of spectrum for mobile services that is generally harmonized across North America. These steps are important for the continued growth of the industry and will help ensure that Canadians continue to benefit from access to superior telecommunications services.

Sincerely,

*electronic copy*

J. David Farnes  
Vice President,  
Industry & Regulatory Affairs

cc: Suzanne Lambert

1. The Canadian Wireless Telecommunications Association (CWTA) is pleased to provide the following comments on DGTP-007-03 *Consultation on Spectrum for Advanced Wireless Services and Review of the Mobile Spectrum Cap Policy* (as amended by DGTP-008-03 *Extension to the Comment Period for Notice No. DGTP-007-03*). CWTA and its members participated in the development of, and fully support, the comments of the Radio Advisory Board of Canada.
2. 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.

## **GENERAL**

3. CWTA is encouraged that the Department is moving to ensure an adequate long-term supply of spectrum for mobile services. This is important for the continued growth of the industry and will help ensure that Canadians continue to benefit from access to superior telecommunications services.
4. CWTA is also encouraged that the Department's proposals are generally harmonized across North America. This is important as it will help contribute to the wider availability of new equipment and terminals for the Canadian market. Such harmonization will also allow for continued seamless North American roaming for both voice and data services.
5. CWTA supports the Department's decision to allocate the bands 1710-1755 MHz and 2110-2155 MHz, with the upper band used for base transmit. CWTA and its members have long supported this pairing. This allocation will contribute to both North American and global harmonization.
6. The Department has stated that it anticipates the spectrum allocated as a result of this consultation will be licenced in the 2005/2006 timeframe. CWTA believes that the licensing of this spectrum will be required no earlier than 2007. In light of current uncertainties surrounding the timing and quantity of AWS spectrum to be licensed in the US, CWTA believes that the Department

should undertake an additional consultation in the 2005 timeframe in order to consider, among other things, the appropriate specific timing of the licensing of AWS spectrum in Canada.

## **Proposed Changes to the Canadian Table of Frequency Allocations**

7. CWTA has reviewed the proposed changes to the Canadian Table of Frequency Allocations in support of AWS and offers the following comments.

### **Bands 1710-1755 MHz and 2110-2155 MHz**

8. The CWTA supports the Department's proposed allocation changes that would enable Advanced Wireless Services to be deployed in this band. As a result, CWTA supports the following proposals to:
  - Raise the mobile service to a primary status in the 1710 – 1755 MHz band
  - Remove the application of the footnote C5 which limits mobile use to the Government of Canada
  - Add a new Canadian footnote CXYZ to facilitate the introduction of AWS
  - Adopt the new and modified international footnotes 5.384A and 5.385 (WRC2000) to allow the spectrum to be used for IMT2000 systems and to make Radio Astronomy a secondary service in the sub band 1718.8 – 1722.2 MHz
  - Remove the application of Canadian footnote C33 from the band 1710 –1755 MHz since the use of this sub-band for aeronautical public correspondence does not apply
  - Adopt the WRC 2000 IMT-related international footnotes (5.388 and 5.388A) and the modifications to 5.388A agreed to at WRC-2003 which refers to Resolution 221.
9. CWTA notes that implementation of the changes noted above will enable the implementation of AWS in accordance with the mobile service allocation; allow for the implementation of High Altitude Platform Stations (HAPS) to be used as base stations for IMT-2000; and provide 2110-2155 MHz as a globally harmonized base-transmit band.
10. CWTA generally agrees with the Department's proposed retention of the allocation and designation for the band 1755-1850 MHz. However, we note that while the NTIA in the US through their studies has decided to not make available the use of 1755 – 1770 MHz for AWS in the foreseeable future, CWTA encourages the Department to consider making this sub-band

available for AWS systems. This would enable manufacturers to provide handsets with a 60 + 60 MHz capability (i.e. 1710 – 1770 MHz paired with 2110 – 2170 MHz) which would be consistent with the usage of the band in Europe/Asia. Such a 60 + 60 MHz designation would also provide additional economies of scale for manufacturers and negate potential requirements to manufacture multiple handsets with different frequency range capabilities.

11. In the new footnote CXYZ the Department proposes to continue to afford fixed stations priority over the mobile service in the above bands until April 1, 2007. CWTA considers this date to be appropriate. However, using a fixed date such as this — when the dates associated with the planned licencing process are unknown — could cause unintended consequences. For example, CWTA supports (as discussed at paragraph 24) a one- and two-year notification period for the transition between licensees. If the licencing process concluded in 2005 or early 2006, displacement could be required prior to the change in priority status. As a result, CWTA recommends that the change in priority status occur one year after the competitive licensing process commences, but not later than 1 April 2007.
12. At the end of this section, the Consultation paper states, “The Department envisages that this spectrum will be released through a competitive licensing process in the 2005/2006 time frame.” The CWTA notes that the Department’s “Guidelines on the Licensing Process and Spectrum Release Plan (2001 Edition)” December 2001 RP-020 notes at section 3.2 that “. . . a competitive licensing process using either a comparative selection or auction licensing approach, would be initiated according to the situation.” (emphasis added)
13. While the CWTA supports the use of a competitive licensing process to govern the release of this spectrum it also considers, given RP-020, that Industry Canada has two competitive licensing tools available to it. Specifically, as RP-020 states, these are comparative selection or auction. The CWTA submits that Industry Canada should give equal weight to each of these options in light of, as RP-020 notes, the situation existing in the Canadian wireless market at the time, when considering the appropriate competitive licensing process to apply in the circumstances.
14. Should, however, the Department consider that an auction is the appropriate competitive licensing process to use, the CWTA recommends that Industry Canada immediately consider legislative proposals that would enable the Department to divert at least a portion of the respective auction proceeds toward the achievement of wireless industry related social government objectives, e.g. spectrum management, wireless lawful access or wireless priority access requirements or to offset other federal government regulatory

fees imposed on the wireless industry. The CWTA notes that the United States has started to do this e.g. with the diversion of some auction proceeds to accomplish federal government spectrum relocation purposes. The CWTA considers that such an approach would be more appropriate and reasonable than simply depositing the entire auction proceeds in the General Revenue fund.

**Bands 1850 – 1990 MHz, 1990 – 2025 MHz and 2160 – 2200 MHz**

15. CWTA generally agrees with the Department's proposed changes to add footnote 5.384A related to IMT-2000, MOD 5.388A to allow for usage of HAPS to the allocation of these bands as well as to adopt the new and modified international footnotes in the band pertaining to IMT-2000.
  
16. The CWTA believes that the addition of Canadian footnote CZZZ to re-designate the currently licence exempt 1910-1920 MHz band to licensed PCS use is premature at this time. CWTA generally supports harmonization of spectrum bands throughout North America, and although under review in the US, we also note that such a decision has not yet been taken by the FCC. Furthermore, the importance of this is diminished by the allocation of the additional 90 MHz of AWS spectrum above. With respect to the Department's consideration of expanding the licensed PCS spectrum by pairing the 1910-1920 MHz with the band 1990 – 2000 MHz, CWTA submits that, in light of the fact that the US has not yet made a decision on this specific pairing and the allocation of additional AWS spectrum, it would be premature for Canada to proceed with this at this time.
  
17. CWTA generally agrees with the Department's rationale concerning the resulting benefits to be gained through harmonization of North American spectrum for satellite allocations as they apply to both the MSS allocation as well as to the accommodation of terrestrial wireless services. Therefore CWTA is in agreement with the proposals to:
  - Suppress the mobile-satellite service allocation in the bands 1990-2000 MHz, 2020-2025 MHz and 2160-2180 MHz
  - Include a new footnote CYYY to designate the bands 1990-2000 MHz, 2020-2025 MHz and 2155-2180 MHz for the mobile and fixed services (subject to spectrum utilization policies)
  - Modify the Canadian footnote C36 to reflect the new bands for the mobile-satellite service
  - Add the new international footnote 5.351A dealing with MSS allocations by specifically referring to resolutions that pertain to the satellite component of IMT-2000.

### **Band 2155-2160 MHz**

18. CWTA agrees with the Department concerning the benefits on the use of contiguous spectrum for the delivery of mobile services. CWTA further agrees with the Department's proposal to include this 5 MHz in the Canadian footnote (CYYY – allowing the implementation of AWS within the 2155 – 2160 MHz band) subject to spectrum utilization policies.

## **Proposals for Spectrum Utilization Policies**

### **Bands 1710-1755 MHz and 2110-2155 MHz**

19. CWTA supports the Department's goal to establish an environment that allows the flexible and innovative use of spectrum in terms of services and technologies. The CWTA considers that the minimum size of the spectrum blocks should be 5 + 5 MHz with 400 MHz duplex spacing.
20. However, should the US decide to deviate from this approach, CWTA considers that the matter should be reviewed further given that it may be more important to ensure full North American harmonization of the bands for AWS use.
21. CWTA also notes its previous comments with regard to the possible future allocation of 2 X 60 MHz (i.e. 1710 – 1770 / 2110 – 2170 MHz). While it is understood that the additional 2 X 15 MHz (i.e. 1755 – 1770 / 2155 – 2170 MHz ) has not been identified for use for AWS in the US, such an allocation would be consistent with what is being planned for other regions of the world and enable more cost effective equipment to be manufactured for a worldwide market.

### **Bands 1910–1920 MHz and 1990–2000 MHz**

22. CWTA acknowledges that very little equipment development has taken place for use in the LE PCS spectrum (i.e. 1910–1920 MHz). This fact, together with the FCC's apparent desire to pair this spectrum with 1990–2000 MHz for licensed PCS use, suggests that the Department's direction is a reasonable one. However, as noted above, CWTA believes that it is premature to extend the licensed PCS band with this spectrum at this time. Therefore, CWTA does not believe it is necessary develop a Spectrum Utilization Policy.

### **2020–2025 MHz and 2155–2180 MHz**

23. CWTA believes that it is premature to develop Spectrum Utilization Policies for the introduction of AWS in these bands. However, as previously noted, CWTA believes that for the longer term, and in order to take advantage of the

proposed worldwide frequency harmonization and anticipated economies of scale for equipment availability, the Department should allow for the extension of the AWS bands utilizing the 1755–1770 MHz with 2155–2170 MHz spectrum bands.

## **Review of the Mobile Spectrum Cap Policy**

*This section does not reflect the views of Microcell Telecommunications Inc.*

24. CWTA agrees with the Department's assessment that it is important to conduct a full review of the mobile spectrum aggregation limits as part of this consultation. Further, CWTA agrees that any changes to the aggregation limits should be announced in sufficient time prior to any licencing of new spectrum for AWS.
  
25. Retaining the existing spectrum aggregation limit and extending it to the new spectrum to be allocated as a result of this consultation is not an option. As the Department observed in the Gazette Notice, some wireless carriers are already at or near the limit. Without a change, the existing carriers will be effectively prevented from acquiring any more spectrum. CWTA submits that such an outcome is not in the public interest. All existing licensees must be provided the opportunity to acquire new spectrum.
  
26. CWTA recognizes that the Department has a number of options to consider for changes to the spectrum aggregation policy. CWTA recommends that the Department remove the spectrum aggregation limit, but limit the amount of spectrum that may be acquired by a prospective licensee within a particular licencing process (such as a comparative licensing process or an auction).

## **Proposed Transition Policy**

27. CWTA supports the minimum one year displacement notification period if incumbent fixed stations affect deployment of Advanced Wireless Stations in urban areas or in specific geographical areas such as along major highway corridors and a two year minimum displacement notification period in all other areas. This process is consistent with that established for the auction of additional PCS spectrum in 2001<sup>1</sup>. Further, such timing is adequate given the amount of time remaining before the Department expects to licence the spectrum.

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<sup>1</sup> *Modifications to the 1995 Spectrum Transition Policy For Licensed PCS*., Policy and Licensing Procedures for the Auction of Additional PCS Spectrum in the 2 GHz Frequency Band, Appendix 2

28. CWTA expects that some parties may argue in favour of a longer transition period than the one- and two-year model that has been proposed by the Department. CWTA does not support a longer transition period for the reason that, immediately following the licencing process, successful bidders will have paid for the right to use the spectrum and will have a reasonably high expectation that they will be permitted to utilize the spectrum as soon as possible, in order to recoup their significant investment. Further, by the time the licencing process has been concluded, and given the proposed one- and two-year transition period, incumbent fixed operators will have had several years to plan their transition out of the band. CWTA also notes that a fundamental principle underlying the proposed transition policy is that incumbent fixed operators will be displaced only where necessary. Therefore, in the circumstances, CWTA does not believe that a longer transition period is reasonable or necessary.

29. CWTA notes that proposed footnote CXYZ contains references to specific dates for the notification period. CWTA recommends that the one- and two-year period(s) begin at the conclusion of the licencing process.

### **Measures to Support Advanced Mobile Telephony Services in Rural Canada**

*This section does not reflect the views of Microcell Telecommunications Inc.*

30. CWTA understands that the Department's intention is to apply these proposals to existing cellular/PCS licences in order to address specific needs that may exist in rural remote areas.

31. CWTA has no objections to the proposal as long as the conditions A (the rural carriers do not compete in the same serving territories having network facilities), and B (the rural carriers operate solely in an unserved or underserved area) always continue to apply.

32. The most effective way to implement this proposal is under commercially acceptable arrangements between the parties. Further, these arrangements should not be subject to approval by the Department.