

WIC CONNEXUS

155 Queen Street, Suite 1204
Ottawa, Ontario K1P 6L1
Tel: (613) 236-1046
Fax: (613) 236-9321

E-MAIL: 24ghz.38ghz@ic.gc.ca

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Consultation on 24 GHz and 38 GHz
Radiocommunications and Broadcasting Regulatory Branch
INDUSTRY CANADA
Room 1559 D – Jean Edmonds Tower North
300 Slater Street
Ottawa, Ontario
K1A 0C8

Attention: Mr. Jan Skora

Dear Mr. Skora:

RE: Gazette Notice No. DGRB-003-98 Consultation on the
24 and 38 GHz Frequency Bands:
Proposed Policy and Licensing Procedures
Published in the Canada Gazette, Part 1 on September 5, 1998

WIC Connexus (“WIC”) is pleased to submit the attached comments in Windows 95 Microsoft Word Version 7.0 in response to the issues raised in the above noted consultation paper.

Yours very truly,

Grant Buchanan,
Vice President, Corporate and Regulatory Affairs
WIC WESTERN INTERNATIONAL COMMUNICATIONS LTD.

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Comments in response to the consultation on 24 GHz and 38 GHz.

A) INTRODUCTION

WIC Connexus (“WIC”) offers the following comments in response to the issues raised in Gazette Notice No. DGRB-003-98 – *Consultation on the 24 and 38 GHz Frequency Bands: Proposed Policy and Licensing Procedures* (the “Consultation Paper”).

WIC was one of the three successful applicants for spectrum at 28 GHz announced by Minister Manley on October 29, 1996.

WIC will comment below on the Department’s initiative in making spectrum available for the deployment of broadband wireless applications in the 24 GHz and 38 GHz frequency bands but first wishes to make a few introductory comments relating to certain timing issues and competitive aspects of wireless frequencies.

In Minister Manley’s October 1996 announcement, he stated that

“we want competition in the cable and local telephony markets as soon as possible”

This goal was predicated on an early roll-out of LMCS. Indeed, the Minister’s Press Release indicated that:

“Successful applicants’ business plans have indicated that some services will be up and running by the end of next year”.

The October 29, 1996 New Release concluded by noting that:

“It is the government’s intention to make available for licensing at least two of the four remaining frequency blocks 24 months from now. With this planned auction of more spectrum, those that were not successful or eligible in this round, will have another opportunity. There will be an aggressive timetable to introduce more competition in local wireless distribution services **while providing sufficient time for these pioneering new entrants to implement their systems and establish their viability**”. (Emphasis ours)

Regrettably, through no fault of the LMCS licensees nor of Industry Canada, there was no commercially available LMCS equipment that would enable the “pioneering new entrants to implement their systems and establish their viability”. Commercial LMCS equipment has

just recently become available with deliveries of this equipment in the first part of 1999 at the earliest.

The unavoidable delay in equipment supply was acknowledged in Minister Manley's June 1, 1998 policy announcement, described as follows in the Consultation Paper:

“On June 1, 1998, the Minister of Industry announced that there would be a postponement in the licensing of further spectrum in the band 25-28 GHz for LMCS for at least 18 months. This deferral was in response to a number of developments which had taken place over the past two years including: a shift in the business focus for LMCS from the residential market to the business market, the licensing delay for LMCS spectrum in the U.S., and the subsequent delay in the development of equipment for this band.”

The Department also made the following comment in its Consultation Paper:

“Over the past two years the business focus of LMCS has shifted from the residential market to the business market with an emphasis on the provision of high speed data (Intranet/Internet) services. Also during this period, developments in the 24 GHz and 38 GHz bands indicate that competitive access providers want to expand their point-to-point operations to include point-to-multipoint systems in order to better serve the telecommunications requirements of small and medium businesses. **As a result, it has become evident that there is little difference between the market focus of the 28 GHz LMCS service providers and other broadband operators using frequency bands such as the 38 GHz band.**” (Emphasis ours)

What this means is that the current LMCS licensees and the winners of the proposed auction of spectrum at 24 GHz and 38 GHz (assuming that the auction of those bands proceeds as proposed in the Consultation Paper) will all be chasing the same customers. Having now invested tens of millions of dollars on research, development and licence fees in its LMCS venture and having now witnessed the scheduled release of significant competitive spectrum while continuing to await the arrival of commercially deployable LMCS equipment from Canadian manufacturers, WIC is predictably interested in certain competitive aspects and in ensuring that there is indeed “sufficient time for these pioneering new [LMCS] entrants to implement their systems and establish their viability” as Minister Manley previously indicated.

WIC does not believe that the timelines outlined in the Consultation Paper achieve this objective.

In addition, a second key issue from WIC's perspective is one of ensuring that whomever is successful in the 24 GHz and 38 GHz bands, whenever the release of those bands occurs,

does not have less onerous licence conditions than do the current LMCS licensees, taking all matters into account. This would seem to be appropriate, since, as the Department correctly noted, the current LMCS licensees and the licensees of the 24 GHz and 38 GHz blocks will be in direct competition with one another for the same customers if the Department's proposals are accepted as presented. WIC looks forward to reviewing the proposed licence conditions relating to the release of spectrum at 24 GHz and 38 GHz. Other key areas of interest to WIC include eligibility requirements, caps on aggregation of spectrum, block sizes and fees and these will also be addressed later in this submission.

Against that backdrop, WIC has the following comments.

B) FRAMEWORK FOR SPECTRUM AUCTIONS IN CANADA

In the Consultation Paper, the Department encouraged all respondents to also familiarize themselves with a document entitled "Framework for Spectrum Auctions in Canada" which was released concurrently. In that document, Section 9 reads as follows:

"9. Treatment of Incumbent Licensees

The consultation paper asked whether the results of future spectrum auctions should be used to adjust the licence fees of incumbent licensees with similar spectrum.

A significant majority of respondents advised that in no circumstances should the department adjust existing licence fees based on auction results. There were several reasons cited. First of all, those bidding for licences will already have taken into account the existing fees of incumbents with whom they may compete when they are determining their valuations. If these fees themselves are uncertain, this creates unnecessary complications for the proper valuation of auctioned licences. Second, recalibration implies the retroactive application of today's valuations to licences awarded in the past. This is regarded as unwarranted and unfair because the current fee structure is based on legitimate good faith arrangements made with the government at the time of initial licensing. Third, one should take into account risks incurred and investments made by incumbents. Uncertainty created by recalibration damages established businesses because they made plans and secured financing under the rules of the day. Finally, readjusting fees based on future auction prices will impact on the availability of financing, investments in new technologies, and the provision of new services.

Some respondents suggested that the department 'grandfather' existing spectrum users and grant them the same rights that would be awarded to those who receive their licences via an auction process. One of the immediate concerns associated with

such adjustment is the potential for an unjustified windfall gain. This might be particularly evident in the case where incumbents have been granted access to spectrum but have not used it and not paid fees for it, or where a nominal fee has been paid, but the spectrum is still not in use.

The department finds the arguments presented against fee recalibration compelling and agrees that incumbents' licence fees should not be tied to auction results for all the reasons cited. However, **the department still feels there is a need to discuss how incumbent operators will be dealt with in an auction scenario.** Progression towards the establishment of a homogeneous regime with respect to licence rights will be required for the creation of a fully functioning secondary market for spectrum. **The department intends to discuss possible adjustments to licence definitions, terms, conditions and fees for incumbent licensees in another consultation process.** In particular, these issues will be addressed in the framework of transition of existing users from apparatus-based to spectrum-based licences.” (Emphasis ours)

To the best of WIC's knowledge, the Department's announced process described in the highlighted portion above has not commenced.

We note as well that last summer's LMCS auctions in the U.S. netted far less on a “per pop” basis than the licence fees charged by the Department to its Canadian LMCS licensees. In fact, given that, as noted in the Consultation Paper, the Department has recognized that “the business focus of LMCS has shifted from the residential market to the business market”, one might even question the continued relevance of a “per pop” based calculation for licence fee purposes. As noted earlier, to the extent that spectrum at 24, 28 and 38 GHz will be used to chase the same business customers for the same applications, it would appear inequitable not to be considering the possibility of adjustments. This is not an issue of a potential windfall gain, but rather one of competitive equilibrium.

C) INTERESTED PARTIES ARE REQUESTED TO COMMENT ON THE 24 GHZ BAND PLAN. ANY ALTERNATE BAND PLAN PROPOSALS ARE WELCOME.

The Department is proposing to allocate the bands 24.25 – 24.45 GHz and 25.05 – 25.25 GHz to fixed service on a primary basis with use intended for broadband wireless applications including point-to-point and point-to-multipoint systems. This frequency block arrangement is harmonized with the spectrum designated in the United States (U.S.) and supports this objective.

D) INTERESTED PARTIES ARE REQUESTED TO COMMENT ON THE 38 GHz BAND PLAN AND PROPOSED OPTIONS

The Department is planning to make available seven to nine paired blocks in the 38 GHz band to service providers on an exclusive basis. The standard frequency block size will be 50 MHz throughout the 38.6 – 40.0 GHz band. Two frequency band plan options have thereby been suggested.

WIC is in general agreement with the 38 GHz band plan, again supporting the harmonization of this band with the U.S. Of the two options suggested by the Department, WIC prefers Option 1, in which 700 MHz of spectrum would be assigned in 50+50 MHz block pairs to broadband point-to-point or point-to-multipoint systems on an exclusive basis.

The remaining two 50+50 MHz paired blocks should be added to the five existing 50+50 MHz paired blocks available on a shared, first come, first served basis for point-to-point systems only. WIC shares the view of the CWTA that sufficient demand exists for point-to-point systems deployed on a shared, first come, first served basis to warrant the assignment by the Department of two additional 50+50 MHz paired blocks for this purpose.

E) COMMENTS ARE SOUGHT ON THE AMOUNT OF SPECTRUM THAT IS REQUIRED TO SUPPORT THE BUSINESS PLANS OF THE OPERATORS WISHING TO CONTINUE TO DEPLOY POINT-TO-POINT SYSTEMS IN THE SHARED BLOCKS.

As stated above, WIC believes that there is sufficient demand for point-to-point systems deployed on a shared basis to justify assigning two additional 50+50 MHz paired blocks for this purpose.

F) FURTHER, COMMENTS ARE SOUGHT ON THE SPECTRUM POLICY PROVISIONS CONTAINED WITHIN APPENDIX A.

WIC supports the spectrum policy provisions contained in Appendix A.

G) COMMENTS ARE SOUGHT ON THE PROPOSED CHANGES TO THE CANADIAN TABLE OF FREQUENCY ALLOCATIONS AND VIEW ON SUITABLE SHARING AND CO-ORDINATION CRITERIA WHICH WOULD FACILITATE THE USE OF THESE BANDS BY THE FIXED SERVICE AND BY INCUMBENT PRIMARY SERVICES.

WIC supports the proposed changes in the Consultation Paper.

H) COMMENTS ARE SOUGHT ON THE ELIGIBILITY REQUIREMENTS PROPOSED.

In order to promote a competitive post-auction marketplace for broadband services, the Department alluded to two principles and then reached the preliminary conclusion that there will be no restrictions on bidder eligibility.

WIC respectfully disagrees with the Department's preliminary conclusion in this regard.

In announcing a process relating to spectrum at 24 GHz and 38 GHz with no proposed bidder eligibility and caps of 400 MHz at 24 GHz and 700 MHz at 38 GHz, the potential scenario of four national wireless broadband point-to-multipoint competitors emerges (1 at 24 GHz, 2 at 28 GHz, and 1 at 38 MHz). It is to be recalled that the overall plan (at least at the time 28 GHz was opened up) was to provide wireless competition to incumbent wireline operators. Now, as recognized by the Department, the evolution of the various technologies makes clear that licensees at 24 GHz, 28 GHz and 38 GHz will all be in competition with each other in the business - not the residential - market.

The Department noted in the Consultation Paper that the means at its disposal to promote a competitive marketplace for broadband services "include disallowing the participation of certain firms in the auction and imposing aggregation limits on the amount of spectrum that any bidder may acquire". With respect to the former, it is not clear that the Canadian marketplace will support 4 (or more) national point-to-multipoint service providers in competition with the telcos.

This is especially true, in a situation where, as noted earlier, WIC does not believe that the timelines outlined by the Department in the Consultation Paper will allow its LMCS licensees to “implement their systems and establish their viability” (to use Minister Manley’s words).

At a minimum, if the goal remains viable competition with the wireline incumbent telcos, and if the Department wishes to let the marketplace decide which broadband wireless challenger(s) to the telcos will be successful, why would it not restrict telco eligibility as it did in Round 1 of LMCS? It would be our recommendation that the same restriction on telephone company involvement contained in Round 1 of LMCS be included in the allocation framework at 24 GHz and 38 GHz, namely, that a telecommunications common carrier which provides local exchange telephone service anywhere in Canada not be an eligible entity at the time of the opening up of the spectrum.

With respect to the Department’s second possible method of promoting a competitive post-auction marketplace (imposing aggregation limits on the amount of spectrum that any bidder may acquire) the proposal seems inconsistent in that it would appear to suggest that a huge carrier like Bell Canada, for example, could acquire up to 700 MHz of spectrum at 38 GHz but an entity like WIC, a company that is just getting its first paying customers and has incurred a deficit of tens of millions of dollars in preparing to launch its LMCS business, would be effectively precluded from acquiring more spectrum in the 24 GHz and 38 GHz auction due to concerns over “anti-competitive market power”.

With respect to the two “general principles” enunciated in the Consultation Paper by the Department, it is not clear to WIC what their legal status would be, especially given undefined terms such as “telecommunications services”, “market power”, “is likely to use”, “in competition with”, “significant amount”, “effective competition”, “require”, etc. Given the critical nature of the principles, the legal import of the phrase “the Department suggests that the principles listed below should be adhered to” needs to be fully understood (in the event that the Department rejects our earlier suggestion regarding an outright prohibition against involvement by common carriers providing local exchange telephone service). Are these general principles to be used as a screen in the auction pre-qualification process? Or are they more of an after-the-fact discussion framework? Or are they something in between?

In the case of broadband wireless spectrum, the Department envisions striking a balance between providing sufficient spectrum to support viable business plans and accommodating a range of service providers while addressing the aforementioned principles. The Department is thereby proposing a spectrum aggregation limit whereby any entity, or affiliate, will be eligible for licences covering, in any service area, frequency assignments aggregating to a total of 700 MHz of spectrum.

It is our understanding that demand for spectrum includes a variety of point-to-point users requiring solutions. Since there is a significant demand for small, point-to-point applications dedicated to network extension or individual customer service applications, these should be accommodated. WIC thus supports the views of RABC, for example, in terms of allocating significant parts of the spectrum under consideration to point-to-point use.

That said, WIC does not propose, in this round of comments, to make firm suggestions as to the exact split between point-to-multipoint and point-to-point at 24 GHz and 38 GHz and looks forward to reviewing the first round comments of others in this regard. WIC's expertise is in the point-to-multipoint area, and, as we articulated earlier in this submission, our main interest in this proceeding concerns the competitive aspects of the release of large amounts of additional point to multi-point bandwidth at this time in a manner that could stifle the nascent LMCS industry in this country.

D) COMMENTS ARE SOUGHT ON THE PROPOSAL TO USE TIER 3 SERVICE AREAS FOR THE LICENSING OF THE 24 GHZ AND 38 GHZ BANDS.

WIC agrees with the Department that the services likely to be offered with 24 and 38 GHz spectrum would be amenable to licensing on a regional/local basis and that Tier 3 service areas be used for these bands.

J) COMMENTS ARE SOUGHT ON THE PROPOSED SPECTRUM LICENCE PACKAGES.

The Department is proposing the following Spectrum Licence Packages:

Spectrum Licence	Size (MHz)	Lower Frequency Block (MHz)	Upper Frequency Block (MHz)
A	400	24,250 – 24,450	25,050 – 25,250
B	400	38,700 – 38,900	39,400 – 39,600
C	300	38,900 – 39,050	39,600 – 39,750
D	200	39,050 – 39,150	39,750 – 39,850

WIC agrees as with a number of members of the CWTA and RABC who find the Department’s proposed Spectrum Licence Packages to be excessively large, and thereby inflexible and cumbersome. However, WIC again notes that its central focus is the release of significant blocks of point-to-multipoint spectrum in competition with the 28 GHz blocks at this time and has no specific recommendations as to the proposed Packages other than that they be kept as small as practicable.

K) COMMENTS ARE SOUGHT ON A MORATORIUM OF UP TO 3 YEARS ON THE TRANSFERABILITY OF LICENCES FOLLOWING THIS LICENSING PROCESS.

The Department is proposing that auctioned licences be transferable subject to a number of conditions and guidelines.

WIC believes that licences should be transferable and opposes a moratorium as suggested by the Department as long as there are safeguards ensuring effective competition in the competitively licensed bands.

L) COMMENTS ARE SOUGHT ON A MORATORIUM OF UP TO 3 YEARS ON THE DIVISIBILITY OF LICENCES FOLLOWING THIS LICENSING PROCESS.

The Department is proposing that licensees be permitted to transfer their licences not only in whole, but also in part. It is proposed that licences be divisible in both the bandwidth and geographic dimensions.

WIC is in general agreement that licences be divisible and that there be no moratorium, again subject to implementation of safeguards ensuring effective competition in the competitively licensed bands.

M) COMMENTS ARE SOUGHT AS TO WHETHER THERE SHOULD BE A CONDITION OF LICENCE THAT REQUIRES LICENSEES TO IMPLEMENT THEIR SERVICES WITHIN A SPECIFIED TIME PERIOD THAT IS LESS THAN THE PROPOSED LICENCE RENEWAL PERIOD.

As mentioned earlier, WIC is concerned about the competitive aspects of this Consultation Paper, especially given its rollout requirements, and would not want to be disadvantaged. WIC agrees with CWTA that flexibility in terms of licence divisibility, as noted in the preceding question, would enhance the rollout of services.

N) FURTHER, VIEWS ARE SOUGHT ON THE POSSIBLE MECHANISMS THAT COULD BE EMPLOYED TO VERIFY THE IMPLEMENTATION OF SERVICE WITH THE STATED TIME PERIOD.

Should the Department decide to implement rollout requirements, WIC believes the proposal to conduct a review, if warranted, is reasonable.

O) COMMENTS ARE SOUGHT ON CERTAIN PROPOSED LICENCE CONDITIONS.

WIC has no specific comments on the proposed Conditions of Licence other than the previously discussed concern regarding competitive aspects of these bands as they relate to incumbent licensees at 28 GHz.

P) COMMENTS ARE SOUGHT ON A SUITABLE TRIGGER MECHANISM AND APPROPRIATE VALUE. (THE DETAILS MAY BE DEVELOPED IN CONSULTATION WITH THE RABC.)

WIC is in general agreement with the comments being submitted by the RABC.

Q) COMMENTS AND PROPOSALS ARE SOUGHT ON THE MOST SUITABLE MODELS AND TRIGGER MECHANISMS TO BE USED BY INDUSTRY CANADA WHEN CALLED UPON TO ARBITRATE ON AN UNRESOLVED DISPUTE RESULTING FROM INTERFERENCE BEING EXPERIENCED BETWEEN SYSTEMS OPERATING IN THESE BANDS.

Please see the RABC's comments.

R) COMMENTS ARE SOUGHT ON THE SUITABILITY OF AN EMISSION LIMIT TO REDUCE THE OCCURRENCE OF ADJACENT CHANNEL BLOCK INTERFERENCE UNDER THE CURRENT PROPOSALS FOR SPECTRUM AND GEOGRAPHIC DISTRIBUTION.

Please see the RABC's comments.

S) COMMENTS ARE SOUGHT ON THE STEPS THAT THE DEPARTMENT EXPECTS TO UTILIZE FOR THE LICENSING PROCESS FOR THE 24 GHZ AND 38 GHZ BANDS.

The Department has suggested a number of steps that will be included in the licensing process. WIC reiterates its view that the timetable proposed will not achieve the Department's previously articulated goal of providing sufficient time for its LMCS licensees "to implement their systems and establish their viability". WIC agrees with the CWTA that the reply comment deadline should be moved to March 1, 1999 from January 15, 1999 due to the Christmas season immediately following Industry Canada's target date, i.e. December 18, 1998, for posting all comments on its Spectrum Web Site. An additional six-week comment period would give interested parties a more reasonable amount of time to respond to comments in a thoughtful and meaningful manner.

T) COMMENTS ARE SOUGHT ON THE PROPOSED AUCTION ATTRIBUTES

WIC has no comment on this section of the Consultation Paper.

U) COMMENTS ARE SOUGHT ON THE ABSOLUTE AND RELATIVE LEVEL OF RESERVE PRICES.

For the reasons discussed by the CWTA, WIC also finds the proposed absolute level of reserve prices to be excessively high.

Moreover, WIC agrees with the view of RABC that any profits derived from the proposed auction should be directed toward reducing station and spectrum licence fees in other areas (i.e. 28 GHz) rather than having them flow to the Consolidated Revenue Fund.

V) COMMENTS ARE SOUGHT ON WHETHER THE PROPOSED DEPOSIT AMOUNTS WILL SATISFY THE STATED GOALS.

WIC supports the CWTA's view that, while the pre-auction deposit should be calculated on the basis of the reserve price per point, the reserve prices are too high, and consequently, the pre-auction deposit levels are as well.