



Industry
Canada Industrie
Canada

DGRB-004-09
March 2009

Spectrum Management and Telecommunications

Decision on the Renewal of 24 and 38 GHz Spectrum Licences and Consultation on Spectrum Licence Fees for 24, 28 and 38 GHz Bands

Aussi disponible en français – DGRB-004-09

Canada 

Department of Industry

Radiocommunication Act

Notice No. DGRB-004-09 – Decision on the Renewal of 24 and 38 GHz Spectrum Licences and Consultation on Spectrum Licence Fees for 24, 28 and 38 GHz Bands

Through this notice, Industry Canada hereby announces the publication of the results of the consultation process issued in *Canada Gazette* Notice No. 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*.

Also by way of this notice, and in accordance with subsection 4(1) of the *User Fees Act*, the Department is announcing the proposed fee for the 24, 28 and 38 GHz bands and providing a further opportunity for stakeholders to comment on the proposed fee, as well as on the related service standards.

Submitting comments

Respondents are requested to provide their comments on the proposed fee, in electronic format (XHTML, WordPerfect, Microsoft Word, Adobe PDF or ASCII TXT), to the following e-mail address: spectrum.operations@ic.gc.ca, along with a note specifying the software, version number and operating system used.

Written submissions should be addressed to the Manager, Emerging Networks, Industry Canada, 300 Slater Street, Ottawa, Ontario, K1A 0C8.

All submissions should cite *Canada Gazette*, Part I, the publication date, title and notice reference number DGRB-004-09. Parties should submit their comments no later than April 30, 2009, to ensure consideration. Soon after the close of the comment period, all comments received will be posted on Industry Canada's Spectrum Management and Telecommunications website at <http://www.ic.gc.ca/spectrum>.

Obtaining copies

Copies of this notice and of documents referred to herein are available electronically on Industry Canada's Spectrum Management and Telecommunications website at <http://www.ic.gc.ca/spectrum>.

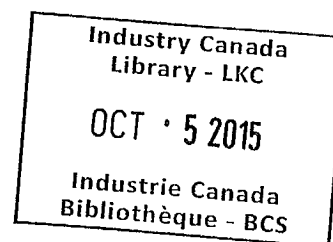
Official versions of *Canada Gazette* notices can be viewed at <http://www.gazette.gc.ca/index-eng.html>. Printed copies of the *Canada Gazette* can be ordered by telephoning the sales counter of Canadian Government Publishing at 613-941-5995 or 1-800-635-7943.

March 6, 2009

Michael D. Connolly
Director General
Radiocommunications and
Broadcasting Regulatory Branch

Contents

1. Intent	1
2. Background	1
Part A: Decision on the Renewal of 24 and 38 GHz Spectrum Licences	2
1. 24 and 38 GHz Licences	2
1.1 Implementation of Spectrum Usage and Licence Renewal	2
1.2 Conditions of Licence for 24 and 38 GHz Licences - Discussion	3
2. Unassigned or Returned 24 and 38 GHz Spectrum, and 28 GHz Local Multipoint Communications System (LMCS) Spectrum	7
2.1 Availability of Unassigned or Returned Spectrum	7
2.2 Block Size and Geographic Service Area	8
2.3 Conditions of Licence – First-Come, First-Served	8
Part B: Licence Fees – Further Consultation	10
1. Background	10
2. Proposed Fee for First-Come, First-Served Licences	10
2.1 General Principles for Establishing Fees	10
2.2 Recommendation	11
3. Service Standards	11
4. Submitting Comments	12
5. Obtaining Copies	12
Annex A – Conditions of Licence	13



1. Intent

The following paper is divided into two parts. Part A outlines decisions resulting from the 2008 consultation process published in *Canada 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* and announces changes to licence conditions, including those related to the implementation of spectrum usage.

In Part B of this document, in accordance with subsection 4(1) of the *User Fees Act*,¹ the Department is announcing the proposed fee for the 24, 28 and 38 GHz bands and providing a further opportunity for stakeholders to comment on the proposed fee, as well as on the related service standards.

2. Background

In February 1996, Industry Canada issued a call for applications announcing that it would use a comparative process to select licensees for two 500 MHz frequency blocks in the 28 GHz band for Local Multipoint Communications Systems (LMCS). Thirty-five companies initially responded with expressions of interest. Of those, 14 subsequently submitted detailed submissions. In October 1996, the Department announced the winners of the comparative process and issued licences to three companies. All licences were returned to the Department by January 2002.

In 1999, Industry Canada conducted its first spectrum auction for fixed point-to-point and point-to-multipoint spectrum in the 24 and 38 GHz bands. Of the 354 licences made available for the auction, 96 remain with the Department.

In April 2008, Industry Canada issued *Canada Gazette* Notice No. 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*. This consultation dealt specifically with the renewal of the 24 and 38 GHz licences issued following the 1999 auction. The paper:

- (a) discussed on what basis 24 and 38 GHz licences should be renewed;
- (b) proposed a renewal fee that would apply to new and renewed licences in the 24, 28 and 38 GHz bands;
- (c) proposed updated licence conditions that would apply to new and renewed licences in the 24 and 38 GHz bands; and
- (d) proposed a first-come, first-served licensing process for unassigned or returned spectrum, including that in the 28 GHz band.

A comment period was provided and nine companies responded to the consultation paper.

¹ See the Department of Justice's website at <http://laws-lois.justice.gc.ca/eng/acts/U-3.7/>.

Part A: Decision on the Renewal of 24 and 38 GHz Spectrum Licences

Having considered the comments received, Industry Canada announces the following decision.

1. 24 and 38 GHz Licences

1.1 Implementation of Spectrum Usage and Licence Renewal

In the consultation paper, the licence condition related to implementation of spectrum usage was discussed thoroughly.

The original licence condition for the implementation of spectrum usage was outlined in the May 1999 *Policy and Licensing Procedures for the Auction of the 24 and 38 GHz Frequency Bands*: “Within three years of the auction’s close, the licensee must demonstrate to the Department that the spectrum has been put into use. The establishment of eight links per one million population (rounded up to a whole number) within a service area, or some other indicator of usage which is acceptable to the Department, will be required.”

As noted in the consultation paper, after receiving requests from licensees over the years citing a lack of suitable and affordable equipment preventing them from meeting the implementation deadline, two extensions to the implementation target date were granted by the Department: first, until July 2, 2007; and later, until the end of the licence term. The licence term for the majority of licences was to end in 2010, with some ending in 2012 and 2013.

The 24 and 38 GHz spectrum auction was held during the “technology boom” and this spectrum held great promise for fixed wireless broadband access, with service providers hoping to offer competitive voice, data and multimedia services. Unfortunately, the technology has not developed as expected, and the availability of suitable and affordable equipment remains an issue. The deployment of radio systems in these bands has been quite limited. The Department also notes that there has not been any significant interest in the spectrum by non-licensees and that other countries are experiencing a similar lack of development.

Since the close of the 24 and 38 GHz auction, some spectrum remains unassigned. One licensee returned its spectrum licences to the Department and another licensee declared bankruptcy. Ninety-six of the 354 licences made available in the 24 and 38 GHz band auction are currently held by Industry Canada. The Department has received very little interest in these spectrum licences. Departmental officials have met with 24 and 38 GHz licensees who have been actively trying with little success to enter into commercial arrangements with other companies (e.g. to sell, lease or trade) to make use of their spectrum.

In this context, Industry Canada recommended in the consultation paper that the condition of licence related to implementation of spectrum usage be waived as a factor in determining whether to renew the current 24 and 38 GHz licences. However, compliance with the remaining licence conditions would be reviewed by the Department prior to approving applications for licence renewal.

All but two of the comments received on this subject were in agreement that deployment of services in these bands has been hindered by lack of equipment and lack of technological development. Furthermore, there was general agreement that there is limited demand and that the large investment made by the licensees in the 1999 auction had yet to produce any significant revenue.

Three respondents suggested that, due to the special circumstances in this band, the existing licence be extended by another five years. Two of these recommended that no associated renewal fee be applied and the third indicated that a renewal fee based on the current value of the spectrum would be acceptable. A fourth respondent recommended a 10-year extension with no additional fees.

The Department notes that equipment is gradually becoming available on the market and that demand from the market will encourage further development of equipment.

Taking into consideration these responses, along with the prevailing challenges with respect to equipment and technological development, the Department has decided to grant a five-year extension to the existing licence term with no applicable fees, and to similarly extend the deadline for system deployment to the end of the extended licence term. Existing licences will be amended to reflect these changes. Two years prior to the end of the extended term, Industry Canada will initiate a consultation process related to the renewal of these licences.

The Department will grant a five-year extension to the existing licence term for the auctioned 24 and 38 GHz spectrum licences, with no applicable fees, and extend the deadline for system deployment to the end of the extended licence term.

The Department will initiate a consultation regarding licence renewal no later than two years prior to the end of the new licence term.

Note that Industry Canada's decision to extend the existing licences for an additional five years (with no applicable fees) is specific to licences in the 24 and 38 GHz bands and does not apply generally to determinations that the Department may make in other frequency bands or, at a future date, for licences in the 24 and 38 GHz frequency bands.

1.2 Conditions of Licence for 24 and 38 GHz Licences - Discussion

As part of the consultation, the Department reviewed the conditions of licence that had been applied after the auction and discussed changes related to the renewal process. Many of the changes were proposed in order to bring the wording up to date with the current wording used by the Department. In view of the Department's decision to grant an extension to the existing licences, only minor changes will be made to the conditions of licence as noted below. Conditions related to the renewal of these licences will be included in a future consultation. Annex A contains a complete list of the licence conditions applicable to the extended licences.

1.2.1 Licence Term

With the decision to grant a five-year extension, this condition will be replaced with the following text:

The term of this licence will expire as indicated above. The process for issuing licences after this term and any issues relating to renewal will be determined by the Minister of Industry following a public consultation.

1.2.2 Spectrum Aggregation Limit

This licence condition will be removed, as its requirement was rescinded for the 24 and 38 GHz spectrum bands through *Canada Gazette* Notice No. DGTP-004-06 – *Decision to Rescind the Broadband Spectrum Cap Policy*.

1.2.3 International Coordination

In the consultation paper, the Department proposed to harmonize the language of the related licence condition with the current wording used by the Department on licences in other frequency bands and to include reference to domestic coordination.

The additional wording indicated that:

- (a) domestic coordination is required as per the Canadian technical standards for this spectrum;
- (b) licensees may be required to provide necessary technical data to Industry Canada in order to facilitate coordination exercises; and
- (c) domestic coordination will follow similar procedures as those for international coordination.

All comments received either concurred with or did not oppose the new wording of this licence condition.

The title for the international coordination licence condition will be amended to include domestic coordination and the related wording will be amended to reflect the changes.

1.2.4 Implementation of Spectrum Usage

As noted in the consultation paper, the main issue of concern in the renewal of the 24 and 38 GHz licences is the licence condition for the implementation of spectrum usage. In the consultation paper, the Department proposed to waive implementation of spectrum usage as a factor in determining whether to renew the 24 and 38 GHz licences and noted that the decision to waive the implementation of the spectrum usage licence condition was specific to the 24 and 38 GHz bands, and does not apply generally to determinations that the Department may make with respect to the implementation of spectrum usage licence conditions in other frequency bands.

Most comments received concurred with or did not oppose replacing the licence condition related to mid-term implementation with consideration of implementation at licence renewal.

Given the decision to consider implementation of spectrum usage at the end of the extended licence term, this condition of licence will remain and the implementation will be required to be met prior to licence renewal.

1.2.5 Lawful Interception

A new licence condition for radiocommunication carriers related to lawful interception was proposed for the 24 and 38 GHz licences. This condition is a requirement in the *Solicitor General's Enforcement Standards for Lawful Interception of Telecommunications* (Rev. November 1995).

One respondent highlighted the discrepancy in the clause in that the reference to "circuit-switched" was missing. Most comments received were in concurrence with the requirement; however, one was conditional, particularly on costs and timing. An incumbent indicated that it has been active with the rest of the telecommunications industry in highlighting three issues that are highly important to the industry. These are:

- that service providers receive financial compensation for the costs incurred in supporting law enforcement activities;
- that an adequate transition period be provided to service providers upon the coming into force of any legislation dealing with lawful interception; and
- that lawful interception requirements be based on industry standard capabilities and not enforce any special made-in-Canada solutions.

The Department believes that the concerns related to cost and timing are outside the scope of the consultation on the condition of licence and that interested parties should bring their concerns forward during any legislative process that the government undertakes concerning lawful interception. In consideration of the comments related to timing, the condition allows for the licensee to request that the Minister of Industry forbear from enforcing certain lawful interception capability requirements for a limited period of time.

In reference to a comment on the requirement to meet this condition being imposed on a primary licensee where a subordinate licence exists, the Department notes that subordinate licences are issued based on several factors, including the service being provided. Should the subordinate licensee use the spectrum as a radiocommunication carrier, as defined in the *Radiocommunication Regulations*, the subordinate licence would be issued with the appropriate licence conditions, including the requirement for lawful interception.

With this licence condition, the Department harmonizes the licence conditions for radiocommunication carriers in the 24 and 38 GHz bands with those for certain radiocommunication carriers in other frequency bands and complies with the requirement in the *Solicitor General's Enforcement Standards for Lawful Interception of Telecommunications* (Rev. November 1995). Note that the reference to "for circuit-switched voice telephony systems" has been reintroduced to the condition.

1.2.6 Research and Development

The Department indicated in the consultation paper that the current condition of licence requiring the funding of research and development will remain as in the current licence conditions, adding the exception for small businesses with less than \$5 million in annual gross operating revenues.

Two comments received requested the removal of this licence condition. Four respondents concurred with or did not oppose the retention and modification of this condition with one of the four recommending that additional funds be set aside from all licence fees collected by the government and allocated to research and development funding.

It should be noted that the Department does not collect any funds by way of this condition of licence. This condition will remain in force with the inclusion of additional wording related to the exception for small businesses. The Department is currently reviewing the Research and Development (R&D) condition of licence. Noting that this condition applies to many licences, the discussion will take place in the upcoming *Consultation on Revisions to the Framework for Spectrum Auctions in Canada*.

1.2.7 Annual Reporting

In the consultation paper, Industry Canada proposed to harmonize the language of this licence condition with the current wording for licences in other frequency bands and, in particular, to remove the reference to the numbers of hubs and sites.

The modified wording indicated that:

- (a) an annual update on the implementation and spectrum usage within the area covered by the licence would be required and the reference to the number of hubs and sites would be removed; and
- (b) the reference to facilitating compliance with the research and development condition by consulting Industry Canada's *Guidelines for Compliance with Radio Authorization Condition of Licence Relating to Research and Development (GL-03)* would also be removed, as it already appears in the Research and Development licence condition.

The remainder of the original wording would remain in effect.

Several respondents were opposed to providing an audited statement of research and development expenditures with an accompanying auditor's report because of the cost of undertaking such an audit. Recommendations included submitting a certificate signed by an officer of the company confirming the research and development expenditures incurred.

Noting the costs involved in obtaining audited reports, particularly those related to research and development programs, the Department agrees to modify the condition to remove the reference to "... including an audited Statement of Research and Development Expenditures with an accompanying Auditor's Report ..." and replace it with wording to the effect that the report must be certified by an officer of the company and that the Department reserves the right to request the audited Statement and accompanying Auditor's Report.

This modification related to research and development will be applied to long-term licences in all frequency bands.

1.2.8 Mandatory Antenna Tower and Site Sharing

A condition of licence on mandatory antenna tower and site sharing has been included in accordance with *Canada Gazette* Notice No. DGRB-002-08, through which Industry Canada set out conditions of licence to mandate roaming and antenna tower and site sharing and to prohibit exclusive site arrangements, and "... the amendments to licence conditions regarding tower sharing will apply to radiocommunication carriers in all bands." With the release of *Canada Gazette* Notice No. DGRB-005-08 – *Release of Industry Canada's Arbitration Rules and Procedures for Mandatory Roaming and Antenna Tower and Site Sharing* on November 29, 2008, this condition of licence came into effect.

The existing conditions of licence are amended as indicated in Annex A, effective immediately.

2. Unassigned or Returned 24 and 38 GHz Spectrum, and 28 GHz Local Multipoint Communications System (LMCS) Spectrum

2.1 Availability of Unassigned or Returned Spectrum

Comments received on this topic generally agreed with Industry Canada's proposal to make available any previously auctioned spectrum in the 24 and 38 GHz bands that was unassigned or returned, as well as 28 GHz LMCS spectrum that was originally assigned through a comparative licensing process but returned to the Department in 2002. Citing an inability to generate a return on their investment in the auctioned spectrum, some respondents opposed the release of this unassigned spectrum. However, Industry Canada notes that equipment is becoming more available on the market and that demand for backhaul from AWS licence winners is expected to increase. Furthermore, the Department, in accordance with the Spectrum Policy Framework, supports the efficient functioning of markets by making spectrum available for use in a timely fashion and does not consider withholding spectrum from the market as warranted.

As a result, the Department intends to make this spectrum available using a first-come, first-served licensing process.

The details of this licensing process will be set out in a Client Procedures Circular (CPC) to be developed prior to the finalization of the proposed fees.

The Department will implement a first-come, first-served process for the unassigned and returned 24, 28 and 38 GHz spectrum. The Department reserves the right to review the use of the first-come, first-served process and to consider a competitive licensing process at any time should demand warrant.

The licensing process for the 24, 28 and 38 GHz bands will be set out in a Client Procedures Circular (CPC) to be developed prior to the finalization of the fees.

2.2 Block Size and Geographic Service Area

Of the three comments received related to block sizes and geographic service area for the 28 GHz band, one suggested the establishment of blocks of 100 MHz on a Tier 3 basis, a second suggestion called for the establishment of 100 MHz blocks without stipulating the geographic area and the third suggestion was for a 200 MHz block on a Tier 3 basis.

Detailed technical specifications for this band are set out in SRSP-325.35 and RSS-191. These standards will be updated as needed in consultation with the Radio Advisory Board of Canada (RABC). The Department will take into consideration the comments received regarding block size and geographic service area in consultation with the RABC.

2.3 Conditions of Licence – First-Come, First-Served

The conditions of licence for the extended licence term, described in Annex A, will apply to all annual first-come, first-served licences in the 24, 28 and 38 GHz bands, with the following exceptions:

(a) Licence Term (Condition 1)

The following condition replaces the condition described in Annex A:

The term of this licence will expire on March 31 of each year. Licensees must pay the annual licence fee before March 31 of each year for the subsequent year (April 1 to March 31).

(b) Research and Development (Condition 10)

This condition does not apply to first-come, first-served licences.

(c) Implementation of Spectrum Usage (Condition 12)

This condition does not apply to first-come, first-served licences.

(d) Annual Reporting (Condition 13)

Licensees must submit an annual report for each year of the licence term, including the following information:

- a statement indicating continued compliance with all conditions of licence;
- an update on the implementation and spectrum usage within the area covered by the licence;
- existing audited financial statements with an accompanying auditor's report; and
- a copy of any existing corporate annual report for the licensee's fiscal year with respect to the authorization.

All reports and statements must be certified by an officer of the company and submitted, in writing, within 120 days of the licensee's fiscal year end, to the address below. Where a licensee holds multiple licences, the reports should be broken down by service area. Confidential information provided will be treated in accordance with section 20(1) of the *Access to Information Act*.

Manager, Emerging Networks
Radiocommunications and Broadcasting Regulatory Branch
Industry Canada
300 Slater Street, 15th floor
Ottawa, Ontario K1A 0C8

Part B: Licence Fees – Further Consultation

1. Background

Licences in the 28 GHz frequency band have annual radio authorization fees as established in *Canada Gazette* Notice DGRB-004-96 – *Radio Authorization Fees for Local Multipoint Communication Systems in the 28 GHz Range (LMCS)*. These fees are based on a set fee for a 500 MHz block. Industry Canada notes that the fee needs to be more flexible with respect to the amount of spectrum being licensed.

First come, first served licences in a portion of the 38 GHz frequency band have annual radio authorization fees as established in *Canada Gazette* Notice DGRB-004-97 – *Radio Authorization Fees for Fixed Radio Systems in the 38.4-40.0 GHz Frequency Bands*. The fees are applicable to stations licensed on a grid-cell basis in the sub-bands 38.4-38.7 GHz, 39.1-39.4 GHz and 39.8-40.0 GHz.

As per *Canada 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*, the Department consulted on a proposed fee for the 24, 28 and 38 GHz licences.

The discussion was based on setting a renewal fee for 24 and 38 GHz licences. As the Department has decided to extend the term of the original licence by five years, this second consultation on the proposed licence fees will be used to determine the annual licence fee for first-come, first-served licences in the previously auctioned spectrum in the 24 and 38 GHz bands that was unassigned or returned, as well as in the 28 GHz LMCS spectrum. The proposed fee will also be applied as a renewal fee for auctioned licences at the end of the extended licence term.

In accordance with subsection 4(1) of the *User Fees Act*, the Department is providing a second opportunity for stakeholders to comment on the proposed fee.

2. Proposed Fee for First-Come, First-Served Licences

2.1 General Principles for Establishing Fees

In general, fees established by the Department for spectrum authorizations have as their goal to:

- promote the efficient allocation of resources (i.e. to eliminate the excess demand that often exists with “free goods” by subjecting programs to a market test of supply and demand);
- earn a fair return for the Canadian public for the privilege of access to, or exploitation of, public resources.

The consultation paper, DGRB-001-08, which can be found at <http://www.ic.gc.ca/eic/site/smt-gst.nsf/eng/sf08935.html>, included a discussion on the setting of a licence fee and provided a comparison of domestic and international fees and the revenue and cost elements.

There was general agreement that the same fee should be charged for first-come, first-served licences in the unassigned spectrum in the 24 and 38 GHz bands and the 28 GHz LMCS spectrum. Some comments received were against the proposal to apply the proposed fee as a renewal fee, and advocated an extension with no fees or the application of fees based on cost recovery.

2.2 Recommendation

Industry Canada continues to believe that the proposed annual fee of \$0.003205 per 100 MHz per population² with a minimum fee of \$150 per licence is fair and provides a reasonable assessment of the economic value of the spectrum. However, the proposed fee is being restated on a per MHz per population basis to ensure flexibility in issuing licences in the future, particularly in the 28 GHz band where a decision has yet to be made on the band plan.

Because the Department has decided to grant a five-year extension with no applicable fees, the fee will be applied only to licences issued on a first-come, first-served basis at this time. However, the fee will be applied as a renewal fee at the end of the extended term. This decision to apply the fee to first-come, first-served licences is based on Industry Canada's analysis as described in the consultation paper 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*, and on the comments received during the consultation.

Comments are sought on the proposed annual fee of \$0.0003205 per MHz per population with a minimum fee of \$150 per licence for licences issued on a first-come, first-served basis applicable to returned and unassigned spectrum resulting from the 24/38 GHz auction and to LMCS 28 GHz spectrum.

The Department also seeks comments on the application of the proposed annual fee as a renewal fee for licences at the end of this extended term.

3. Service Standards

Industry Canada also invited comments on the service standards proposed for this licensing process: the existing microwave application service standards of four weeks from receipt of an application, not including coordination with a foreign administration or agency, and typically 10 weeks if coordination is required. In addition, the Department proposed negotiation on a specific in-service date due to the complexity of some applications.

In general, comments received indicated that the proposed service standards, along with a negotiable in-service date, are adequate and that, in the past, the Department has been timely in responding to licence applications.

Service standards for this licensing process will be four weeks from receipt of a completed application, not including coordination with a foreign administration or agency, and typically 10 weeks if coordination is required.

When requested, a specific in-service date may be negotiated with the Department.

² Statistics Canada census population data.

4. Submitting Comments

Stakeholders are invited to submit any concerns, suggestions or proposals regarding the proposed fee and the related service standards to the Department no later than April 30, 2009. Respondents are requested to submit their comments electronically to: spectrum.operations@ic.gc.ca.

Written submissions should be addressed to:

Manager, Emerging Networks
Radiocommunications and Broadcasting Regulatory Branch
Industry Canada
300 Slater Street, 15th Floor
Ottawa, Ontario K1A 0C8

All submissions should cite *Canada Gazette*, Part I, the publication date, the title and notice reference number DGRB-004-09.

5. Obtaining Copies

All spectrum-related documents referred to in this paper are available on the Spectrum Management and Telecommunications website at <http://www.ic.gc.ca/spectrum>.

For further information concerning the process outlined in this document or related matters, contact:

Manager, Emerging Networks
Radiocommunications and Broadcasting Regulatory Branch
Industry Canada
300 Slater Street, 15th floor
Ottawa, Ontario K1A 0C8
Telephone: 613-990-4411
Fax: 613-991-3514
E-mail: spectrum.operations@ic.gc.ca

Annex A – Conditions of Licence

The following conditions apply to spectrum licences in the 24 and 38 GHz bands.

1. Licence Term

The term of this licence will expire as indicated above. The process for issuing licences after this term and any issues relating to renewal will be determined by the Minister of Industry following a public consultation.

2. Licence Transferability and Divisibility

The licensee may apply in writing to transfer its licence in whole or in part (divisibility), in both the bandwidth and geographic dimensions. Departmental approval is required for each proposed transfer of a licence, whether the transfer is in whole or in part. The transferee(s) must also provide an attestation and other supporting documentation demonstrating that it meets the eligibility criteria and all other conditions, technical or otherwise, of the licence.

The Department may define a minimum bandwidth and/or geographic dimension (such as the grid cell) for the proposed transfer. Systems involved in such a transfer shall conform to the technical requirements set forth in the applicable standard.

The licensee may apply to use a subordinate licensing process.

For more information, refer to Client Procedures Circular, *Licensing Procedure for Spectrum Licences for Terrestrial Services* (CPC-2-1-23), as amended from time to time.

3. Eligibility Criteria

A licensee operating as a radiocommunication carrier must comply on an ongoing basis with the eligibility criteria in section 10(2) of the *Radiocommunication Regulations*. The licensee must notify the Minister of Industry of any change that would have a material effect on its eligibility. Such notification must be made in advance for any proposed transactions within its knowledge.

A licensee operating as a radiocommunication service provider or radiocommunication user must comply on an ongoing basis with the eligibility criteria in section 9(1) of the *Radiocommunication Regulations*. The licensee must notify the Minister of Industry of any change that would have a material effect on its eligibility. Such notification must be made in advance for any proposed transactions within its knowledge.

For more information, refer to Client Procedure Circular, *Canadian Ownership and Control* (CPC-2-0-15), as amended from time to time.

4. Radio Station Installations

While site-specific radio licences will not be required for each radio station, licensees must ensure that each radio station is installed and operated in a manner that complies with Client Procedures Circular, *Radiocommunication and Broadcasting Antenna Systems* (CPC-2-0-03), as amended from time to time.

5. Provision of Technical Information

When the Department requests technical information on a particular station or network, the information must be provided by the licensee to the Department according to the definitions, criteria, frequency, and timelines specified by the Department. For more information, refer to Client Procedures Circular, *Licensing Procedure for Spectrum Licences for Terrestrial Services* CPC-2-1-23, as amended from time to time.

6. Compliance with Legislation, Regulations and other Obligations

The licensee is subject to, and must comply with, the *Radiocommunication Act*, the *Radiocommunication Regulations* and the International Telecommunication Union's *Radio Regulations* pertaining to its licensed radio frequency bands. The licence is issued on condition that the certifications made in relation to this licence are all true and complete in every respect. The licensee must use the assigned spectrum in accordance with the *Canadian Table of Frequency Allocations* and the applicable Industry Canada policies, procedures and standards, as amended from time to time. The licensee must also abide by applicable provisions of other statutes and rulings of other statutory bodies, such as the Canadian Radio-television and Telecommunications Commission (CRTC) or the Competition Bureau.

7. Technical Considerations

The licensee must comply on an ongoing basis with the technical aspects of the appropriate Radio Standards Specifications and Standard Radio System Plans, as amended from time to time.

8. International and Domestic Coordination

The licensee must comply with the current and future agreements established with other countries. While frequency assignments are not subject to site licensing, the licensee may be required to furnish all necessary technical data for each relevant site.

The licensee will use its best efforts to enter into mutually acceptable sharing agreements that will facilitate the reasonable and timely development of their respective systems, where applicable, and to coordinate with other licensed users in Canada and internationally where applicable.

9. Lawful Interception

Licensees using spectrum for circuit-switched voice telephony systems must, from the inception of service, provide for and maintain lawful interception capabilities as authorized by law. The requirements for lawful interception capabilities are provided in the *Solicitor General's Enforcement Standards for Lawful Interception of Telecommunications* (Rev. Nov. 95). These standards may be amended from time to time.

The licensee may request the Minister of Industry to forbear from enforcing certain assistance capability requirements for a limited period. The Minister, following consultation with Public Safety Canada, may exercise the power to forbear from enforcing a requirement or requirements where, in the opinion of the Minister, the requirement is not reasonably achievable. Requests for forbearance must include specific details and dates indicating when compliance to the requirement can be expected.

10. Research and Development (R&D)

All licensees operating as radiocommunication carriers must invest, as a minimum, 2 percent of their adjusted gross revenues resulting from their operations in this spectrum, averaged over the term of the licence, in eligible research and development activities related to telecommunications. Eligible research and development activities are those which meet the definition of scientific research and experimental development adopted in the *Income Tax Act*. Adjusted gross revenues are defined as total service revenues, less inter-carrier payments, bad debts, third party commissions, and provincial and goods and services taxes collected. Businesses with less than \$5 million in annual gross operating revenues are exempt from research and development expenditure requirements, except where they have affiliations with licensees that hold other licences with the research and development condition of licence and where the total annual gross revenues of the affiliated licensees are greater than \$5 million.

To facilitate compliance with this condition of licence, the licensee should consult the Department's *Guidelines for Compliance with the Radio Authorization Condition of Licence Relating to Research and Development* (GL-03).

11. Mandatory Antenna Tower and Site Sharing

Licensees operating as radiocommunication carriers must comply with the mandatory antenna tower and site sharing requirements set out in Client Procedures Circular CPC-2-0-17, *Conditions of Licence for Mandatory Roaming and Antenna Tower and Site Sharing and to Prohibit Exclusive Site Arrangements*, as amended from time to time.

12. Implementation of Spectrum Usage

The licensee must demonstrate to the Minister of Industry, by the end of the extended term, that the spectrum has been put into use. The establishment of eight links per one million population (rounded up to a whole number) within a service area, or some other indicator of usage which is acceptable to the Minister of Industry, is required.

13. Annual Reporting

Licensees must submit an annual report for each year of the licence term, including the following information:

- a statement indicating continued compliance with all conditions of licence;
- an update on the implementation and spectrum usage within the area covered by the licence;
- existing audited financial statements with an accompanying Auditor's Report;
- a report of the Research and Development Expenditures for licensees operating as radiocommunication carriers whose annual gross operating revenues exceed \$5 million (the

Department reserves the right to request an audited Statement of Research and Development expenditures with an accompanying Auditor's Report);

- supporting financial statements where licensees are claiming an exemption based on an annual gross revenue of less than \$5 million; and
- a copy of any existing corporate annual report for the licensee's fiscal year with respect to the authorization.

All reports and statements must be certified by an officer of the company and submitted, in writing, within 120 days of the licensee's fiscal year end, to the address below. Where a licensee holds multiple licences, the reports should be broken down by service area. Confidential information provided will be treated in accordance with section 20(1) of the *Access to Information Act*.

Manager, Emerging Networks
Radiocommunications and Broadcasting Regulatory Branch
Industry Canada
300 Slater Street, 15th floor
Ottawa, Ontario K1A 0C8

14. Amendments

The Minister of Industry continues to have the power to amend the terms and conditions of spectrum licences (paragraph 5(1)(b) of the *Radiocommunication Act*).

