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Spectrum Management and Telecommunications Policy

**Call for Expressions of Interest to
Develop and Operate a Fixed Satellite
Space Station in Orbital Position
118.7° W Longitude to Serve the
Canadian Market and Beyond**

Canada

Aussi disponible en français - DGRB-015-99

INDUSTRY CANADA

RADIOCOMMUNICATION ACT

NOTICE DGRB-015-99

Call for Expressions of Interest to Develop and Operate a Fixed Satellite Space Station in Orbital Position 118.7° W Longitude to Serve the Canadian Market and Beyond

This Gazette Notice announces the release of a paper, under the above title, that invites interested persons to make submissions to Industry Canada with respect to their interest in developing and operating a fixed satellite space station in the 118.7° W orbital position. As well, the Department invites comments on the nature of a potential competitive process that may be used to license the space station.

In November 1997, the Minister of Industry granted approval for Telesat Canada to use two orbital positions to replace their aging Anik E satellites with advanced Anik F satellites. At the time, the Minister indicated that the process to assign the remaining two orbital positions (114.9° W and 118.7° W longitude) for the C (6/4 GHz) and Ku (14/11 GHz) bands would be open to all eligible, interested parties. The *Policy Framework for the Provision of Fixed Satellite Services*, released in December 1998, provided further information that an open process would be initiated after the Department received a well substantiated request or expression of interest to use the orbital resources.

The Department wishes to inform potential interested parties that an Expression of Interest filing has been received from Telesat Canada to construct and operate a Canadian geostationary fixed satellite-service space station in the orbital position located at 118.7° W that is designed to serve the Canadian market and beyond. Consequently, the first step is to establish whether there is additional demand for the orbital position. If there were no other demand for this orbital position, the Department would proceed with first-come, first-served licensing.

To satisfy the Department's objective that the licensing process is transparent, fair and timely for interested parties wishing to access this orbital position, a call for Expressions of Interest is initiated with this Notice. A 45-day period is provided for Canadian companies to make submissions of Expressions of Interest to the Department in order to establish the demand for this fixed satellite orbital position. The interested parties must be, or be able to become, a Canadian carrier, and must meet the Canadian ownership and control requirements under the *Telecommunications Act*. As well, they must be prepared to meet certain conditions of licence requirements. The interested parties will have to make their submission within the requirements prescribed in the paper.

This paper also solicits comments on the nature of a competitive licensing process, if one is required.

In order to be eligible for consideration, interested parties must submit their Expressions of Interest and comments about a competitive process to Industry Canada in accordance with the instruction in the referenced paper no later than December 15, 1999. Following the close of the submission period, a list of interested parties and comments relating to the nature of a potential competitive process will be made available to the public.

This Gazette Notice and the referenced paper are available electronically via the Internet at the following address:

World Wide Web (WWW)
<http://strategis.ic.gc.ca/spectrum>

or in hard copy, for a fee, from:

Tyrell Press Ltd.
2714 Fenton Road
Gloucester, Ontario
K1T 3T7

Canada toll-free no. : 1 800 267-4862
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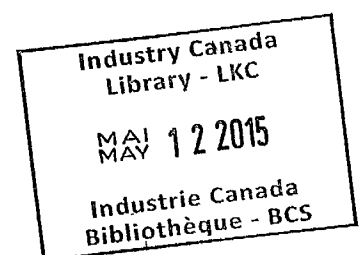
Canada Communication Group
45 Sacré-Coeur Blvd.
Hull, Quebec
K1A 0S9

Canada toll-free no. : 1 888 562-5561
Worldwide tel. no. : (819) 779-4335
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October 22, 1999

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Telecommunications Policy Branch

Jan Skora
Director General
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1. Introduction

Canada currently has access to four orbital positions¹ on the geostationary arc at 107.3° W, 111.1° W, 114.9° W, and 118.7° W longitude for satellites operating in the conventional C band (6/4 GHz) and Ku band (14/11 GHz) for the fixed satellite service. A general description of the fixed satellite orbital positions and associated frequency bands is elaborated in Radio Systems Policy 002 (RP-002), *Policy for the Use of Geostationary-Satellite Orbit by Canadian Satellite Networks*, dated January 1995. The satellite orbital positions at 107.3° W and 111.1° W longitude have been assigned to Telesat Canada for their future Anik F1 and F2 satellites, which will replace the existing Anik E satellites. The remaining orbital positions at 114.9° W and 118.7° W longitude are available for the construction and operation of new satellite space stations. A single multi-band satellite or two single-band satellites could be envisaged in each orbital position.

Radio Systems Policy 008 (RP-008), *Policy Framework for the Provision of Fixed Satellite Services*, dated December 1998, states that upon receiving an Expression of Interest from an eligible telecommunications carrier, the Department will initiate a competitive process to award the licence for the space stations in the remaining two orbital positions. The Department has now received an application from Telesat Canada to construct and operate a geostationary fixed satellite space station in orbital position 118.7° W to serve the Canadian market and beyond.

The purpose of this paper (announced in Canada Gazette Notice DGRB-015-99) is to provide an opportunity, as well as the guidelines, to Canadian companies that might also be interested in developing and operating a fixed satellite space station in this orbital position. Submission of an Expression of Interest must be received no later than December 15, 1999 and must contain, as a minimum, the information requested herein.

The Department also seeks comments on the nature of the competitive licensing process that should be followed if there is interest in this orbital position from other eligible entities.

2. Background

The Canadian fixed satellite service market for Canada-International telecommunications traffic (except for Canada-U.S.) was opened for competition in December 1998, a year ahead of Canada's commitment under the World Trade Organization (WTO) Agreement on Basic Telecommunications (ABT). The domestic and Canada-US cross-border fixed satellite market will be opened to competition on March 1, 2000. RP-008 outlines the policies to access the various components of the Canadian fixed satellite service market. In this

¹ The right to use any orbital position is acquired through the successful application of the procedures found in the International Telecommunication Union (ITU) *Radio Regulations*, including frequency co-ordination of the satellite system, with the operators of other satellite systems potentially affected by the proposed operation. In 1988, the Department concluded a trilateral arrangement on the use of these four orbital positions (RP-002, *Policy for the Use of Geostationary-Satellite Orbit by Canadian Satellite Networks*), and sought international recognition and protection of these positions for Canadian fixed satellite systems through the ITU regulatory process.

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document, Industry Canada places special emphasis on the four orbital positions (107.3° W, 111.1° W, 114.9° W and 118.7° W longitude) to be used by satellites operating in the C and Ku bands to serve all regions of Canada, including Northern Canada.

The WTO Agreement has opened the fixed satellite service market worldwide to various degrees with varied schedules of implementation. These commitments are implemented through domestic licensing processes and requirements that may have different effects for foreign satellites. For example, Canada is developing a bilateral agreement with Mexico to facilitate access to their fixed satellite services market.

3. Telecommunications Objectives

Industry Canada continues to be guided by the telecommunications policy objectives as stated in section 7 of the *Telecommunications Act*. In particular, these geostationary satellite orbital positions are valuable resources that should be utilized to the benefit of all Canadians. To that end, satellite networks deployed into the remaining orbital positions must be capable of providing a wide range of basic and advanced communications services in support of the federal government's Connectedness policies to all regions of Canada, including Northern Canada. Further objectives to be considered by the Department include the enhancement of a competitive market within Canada for the provision of fixed satellite services, the integrity and reliability of the Canadian satellite infrastructure, and the protection of the privacy of telecommunications.

4. Expected Conditions of Licence

Consistent with similar authorizations granted for the development and operation of other Canadian fixed satellite-service space stations, Industry Canada will impose, as a minimum, the following conditions of licence:

- the licensee must comply, on an ongoing basis, with the Canadian ownership and control requirements of subsection 10(2) of the *Radiocommunication Regulations*;
- the licensee must operate the satellite facilities to serve all regions of Canada, including Northern Canada;
- the licensee must invest in satellite-related research and development activities a minimum of two per cent of its total adjusted gross revenues resulting from the lifetime operation of the satellites;
- the licensee must make fair and reasonable efforts to develop, promote and purchase from Canadian manufacturers;

- the licensee must submit an annual report for each year during the term of the licence, indicating continued compliance with all licence conditions, including but not limited to:
 - an update on the implementation of the fixed satellite services;
 - audited financial statements, including an audited statement of research and development expenditures with an accompanying auditor's report, prepared in accordance with the same standards or reporting; and
 - a copy of any existing corporate annual report for the licensee's fiscal year with respect to the authorization.

Other conditions of licence may be required to reflect any operational, regulatory or technical requirements.

5. Available Spectrum Resources for Licensing and Potential Limitations

As noted, Canada has maintained certain international rights to operate a fixed satellite-service space station in the 118.7° W orbital position in the C and Ku frequency bands through filings with the International Telecommunication Union (ITU) and through other international arrangements. The achievement of full rights internationally is achieved through successful international co-ordination under the procedures of the ITU *Radio Regulations*. During the mid-1990s, the Anik-E series of satellites was used to update the technology and plans for the use of this position in the processes of the ITU. (A copy of the ITU co-ordination publication can be found on the Industry Canada Web site at <http://strategis.ic.gc.ca/spectrum>.) To ensure the continuation of Canada's international rights with regard to this orbital position, this information, or a modification of it, will be the basis for the international co-ordination and subsequent licensing action.

Every satellite network must be co-ordinated with potentially-affected satellite networks of other countries to ensure that excessive interference is not received by existing and planned systems. Similarly, the co-ordination process also ensures that the proposed network will not receive excessive interference. During the co-ordination process, it is likely that certain operational restrictions will be required of the networks in order to achieve co-ordination agreement. Also, the applicant will be required to co-ordinate the satellite network with existing Canadian satellite and terrestrial networks. Industry Canada will assist the successful applicant in the international co-ordination of the proposed satellite network with the satellite and terrestrial networks of other countries. Within the framework of the ITU *Radio Regulations*, the Department will attempt to achieve the most favourable conditions possible during this process, but the nature of the co-ordination agreement is very much dependent on the expertise that the successful candidate brings to the negotiation table. Industry Canada cannot provide any assurance or guarantee as to the ultimate success of the co-ordination process, nor foresee any limitations or restrictions that may need to be placed upon the satellite network as a result of the co-ordination process.

6. Eligibility Requirements

The licensee will operate as a radiocommunication carrier and must comply, or be eligible to comply, on an ongoing basis with the Canadian ownership and control requirements outlined in subsection 10(2) of the *Radiocommunication Regulations*.

7. Invitation to Submit Expressions of Interest

The Department invites interested parties to submit an Expression of Interest to develop and operate a fixed satellite-service space station in the 118.7° W orbital position. In its submission, the applicant must provide information describing the status of the entity as a Canadian company, including any alliances or partnerships. The applicant must provide evidence of having, or being able to secure, the financial, technical and operational resources, as well as the competencies to plan, develop and operate a fixed satellite space station including the establishment of associated control earth stations in Canada. As well, the submission must indicate the applicant's acceptance of the expected conditions of licence, as detailed in Section 4.

The submission must also provide an overview of the proposed satellite network capacity and capability, estimated cost, anticipated in-service date and life expectancy of the network, Canadian geographical service areas, any proposed non-Canadian geographical service areas, frequency bands and associated transponder plan, and anticipated ground segment characteristics.

8. Potential Competitive Licensing Process

If there is sufficient demand for the use of this orbital position from eligible Canadian entities, based on the results of the Expressions of Interest phase, a competitive process will be initiated. The competitive licensing process could consist of an administrative comparative selection process or a spectrum auction.

In a comparative selection process, proposals are judged on their merits, with the spectrum resource being allotted to applicants with proposals that best meet pre-determined criteria. For example, in the case of an orbital/spectrum resource, such criteria could pertain to an applicant's ability to provide telecommunications services, capability to participate in international co-ordination activities, financial backing, and research and development commitment. This is usually a long and intensive process that would involve the issuance of a Call for Applications, the preparation of such applications, a departmental review and rating of the applications, and an announcement of the award of the spectrum licence to the successful applicant.

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Spectrum auctions are an alternative selection process available to the Department that could speed up the award of a licence. Auctions are generally not an appropriate spectrum assignment methodology for satellite systems where a significant level of international co-ordination is required. However, Industry Canada is of the view that the co-ordination process for this orbital position is sufficiently advanced to support using an auction for the provision of service in Canada. The Department would use a simplified version of a multiple-round auction, using the relevant attributes described in the *Framework for Spectrum Auctions in Canada*, released in August 1998. Such a process would involve a consultation addressing issues related to the spectrum auction process in question and a second call for applications to participate. Only eligible entities would be permitted to participate in the auction itself, and the highest bidder would be awarded a spectrum licence provided their bid is paid in full at the close of the auction.

Comments are invited on the competitive licensing process that would be most suitable for the granting of a spectrum licence that would permit the use of the orbital spectrum resource for the provision of fixed satellite services in Canada. In the event the Department chooses to make the orbital spectrum resource available for use by means of an auction, comments are also sought as to whether there is any reason to deviate from the approaches laid out in the auction framework document. All comments will be made available to the public and should be provided as a separate submission from the Expression of Interest, to facilitate their publication.

Within 45 days of the close of the submission and comment period, Industry Canada will announce its decision on the licensing process that will be adopted and take appropriate implementation steps.

9. Submission of Expressions of Interest and Comments

Complete applications addressing the information requirements and conditions prescribed above as well as comments on a potential competitive licensing process must be submitted to the Director, Space and International Regulatory Activities, Industry Canada, 300 Slater Street, Ottawa, Ontario, K1A 0C8. To ensure consideration, submissions must be received on or before December 15, 1999. All submissions must cite the Gazette Notice's publication date, title, and reference number.

October 22, 1999

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References:

All references are listed on the Internet on the Industry Canada Web site (<http://strategis.ic.gc.ca/spectrum>) or on the Canadian Radio-television and Telecommunications Commission (CRTC) Web site (<http://www.crtc.gc.ca/>), as follows:

Industry Canada documents

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| RA | Radiocommunication Act, September 1996 |
| RR | Radiocommunication Regulations, April 1999 |
| TA | Telecommunications Act, December 1998 |
| RP-002 | Policy for the use of Geostationary-Satellite Orbit by Canadian Satellite Networks, January 1995 |
| RP-008 | Policy Framework for the Provision of Fixed Satellite Services, December 1998 |
| RP-020 | Guidelines on the Licensing Process and Spectrum Release Plan, October 1999 |
| CPC-2-6-02 | Licensing of Space Stations in Services Other than the Amateur Satellite Service and the Broadcasting Satellite Service in Planned Bands, May 1997 |
| | Framework for Spectrum Auctions in Canada, August 1998 |

CRTC documents

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| Telecom Decision
CRTC 98-17 | Regulatory Regime for the Provision of International
Telecommunications Services, October 1998 |
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