May 23, 2012

Marc Dupuis
Director General
Engineering, Planning and Standards Branch
Industry Canada
19th Floor, 3000 Slater Street
Ottawa, Ontario
K1A 0C8

Re: Canada Gazette, Part 1, March 9, 2012:
Consultation on the Licensing Framework for Fixed-Satellite Service (FSS) and Broadcasting-Satellite Service (BSS) in Canada

Dear Mr. Dupuis,

95WCanSatCo Canadian Satellite Communications Inc. (95WCanSatCo) is a new entrant satellite operator which currently has an approval from Industry Canada to develop the 95°WL 17 GHz BSS spectrum. 95WCanSatCo applauds Industry Canada’s attempts to simplify the Canadian licence process and to harmonize Canadian licence fees with other global administrations.

You will note that the main focus of the 95WCanSatCo comments and recommendations in this Consultation relates to 95WCanSatCo’s unique circumstances during the proposed transition to the new satellite-licensing framework. 95WCanSatCo faces numerous and unique development challenges arising from being a start-up venture and a new entrant into the satellite sector, with an approval in a new and undeveloped 17 GHz BSS band.

95W CanSatCo Comments

95WCanSatCo offers the following response to comments sought by Industry Canada in this consultation. In each case 95WCanSatCo has repeated the applicable comment section stated in the consultation with the 95WCanSatCo response following thereafter.

2-1 Industry Canada is seeking comments on the proposal to extend the use of an FCFS process to assign FSS and BSS spectrum licences.

95WCanSatCo supports the proposal to extend the use of an FCFS process to the assignment of FSS and BSS spectrum licences.

2-2 Industry Canada is seeking comments on the issue of proactive filing to the ITU and on whether there are compelling arguments to continue this practice, to a limited extent, under the FCFS process.

95WCanSatCo believes that Industry Canada must continue proactive filing with the ITU. In
certain instances, such as upon new spectrum beginning to be licenced or where Canada negotiates ‘Bi-Lateral’ or ‘Tri-lateral’ agreements for utilization of certain spectrum, Industry Canada must proactively continue to file the required API’s and CR’s to protect Canada’s future spectrum rights at the ITU.

In other instances Industry Canada may obtain broad knowledge of future spectrum requirements from industry groups, or in private consultations with spectrum users, which may allow Industry Canada to ascertain future forecasted capacity requirements for spectrum beyond current Canadian operator forecasts or financing capability. In that case it would be very beneficial for Canada’s spectrum regulator to proactively protect the potential spectrum for Canadians.

2-3 Industry Canada is seeking comments on the following proposed rules for an FCFS satellite licensing process:

- applicants will be required to submit applications electronically, and Industry Canada will establish the time of receipt through the electronic submission;
- if Industry Canada deems an application incomplete or inadequate (according to defined criteria), the application will be declined and no longer considered until submitted as a new application;
- if an application is on hand from a second applicant for the same spectrum when the first is declined, Industry Canada will immediately consider the second application;
- once a licence has been issued, any applications on hand for the same spectrum will be automatically dismissed; and
- two successful applications, received simultaneously, will result in both applications being approved, with the requested spectrum divided equally.

95WCanSatCo fully supports the concept of submitting applications electronically with an appropriate time stamp process.

95WCanSatCo believes that if an application is ‘substantively complete’ it should not be declined outright; but that Industry Canada should have discretion to inform applicants where their application has been found lacking, and provide the applicants some short time to make corrections. For that purpose 10 working days should be sufficient.

95WCanSatCo agrees that once a licence is issued, any application(s) on file for the same spectrum should be dismissed.

95WCanSatCo opposes the division of spectrum upon simultaneous receipt of applications. In the unlikely event of two or more applications being received simultaneously, 95WCanSatCo believes that the greater benefit would be derived by a comparative process of the simultaneous applications and benefits proposed, and suggests that the Licence be awarded to the applicant proposing the greatest benefit to Canada as determined by Industry Canada and at the Minister’s discretion.
2-4 Industry Canada is seeking comments on the assessment criteria to be used in an FCFS process. In their comments, respondents are encouraged to elaborate on these or any other criteria they deem suitable.

95WCanSatCo supports the suggested assessment criteria as appropriate for an FCFS process.

2-5 Industry Canada is seeking comments on these and any additional measures to minimize the potential for abuse of an FCFS process.

95WCanSatCo believes the majority of the measures proposed to minimize abuse of the FCFS process is overly onerous, and may have the unintended consequence of favouring larger satellite fleet operators and/or other large corporations. In particular the proposed financial measures inherently favour larger corporations, to the specific detriment of start-ups and new entrants. 95WCanSatCo opposes all of the proposed financial measures.

95WCanSatCo supports most of the proposed administrative measures as being sufficient to safeguard against abuse of an FCFS process; with the following clarifications and additions:

1. Applicants or Licencees should not be allowed to hold more than two unutilized spectrum licences in any frequency band which are not operational, nor more than four unutilized spectrum licences in total;
2. Satellite construction and launch programs are often subject to delays which are out of the control of the operator. Given those delays typically do not manifest themselves on more than one satellite program at any given time, Applicants which are more than 90 days late meeting current milestone dates on two or more licences, or who have requested milestone delays on two or more licences, should not be eligible to receive any further licences until they have cleared those deficiencies;
3. Strict enforcement of milestone dates by revoking licences and restarting the licence process is both unnecessary and punitive. Industry Canada and applicants must have discretion in the event of bona fide problems arising which are able to be corrected without a risk of missing the critical BIU dates. Without discretion to cure issues to the best of an applicant’s ability as they arise; financing and construction programs would possibly be deemed too risky within the industry to warrant funding or to enter into contracts.

2-6 Industry Canada is seeking comments on the establishment of a 45-business-day service standard to issue a satellite spectrum licence.

95WCanSatCo fully supports the establishment of a 45-business-day service standard as being achievable and reasonable from a user perspective.

3-1 Industry Canada is seeking comments on the proposal to issue spectrum licences immediately following approval, and to apply fees upon issuance based on the amount of spectrum authorized.

95WCanSatCo supports the proposal to issue spectrum licences immediately following approval. However, 95WCanSatCo has an alternate proposal to the full fees for the spectrum authorized being due when the licence is issued. Unlike any other spectrum licence function, following the issue of a satellite spectrum licence there is normally a three-year timeframe to build and launch
the satellite before revenues are generated to cover the cost of these fees. In order to ease the cost burden while satellite operators are not earning revenue during the abnormally long construction and development phase, 95WCanSatCo recommends that only 33% of the spectrum fees are charged annually during the three-year development window.

95WCanSatCo notes that it is particularly onerous and unprecedented for Industry Canada to levy fees to existing Approvals; as the business plans and financing of the satellite programs did not anticipate being levied fees for spectrum that they are not yet able to utilize. Should an FCFS licensing system be implemented, existing approvals for assigned, unused spectrum should be grandfathered without licence fees until in operation.

3-2 Industry Canada is seeking comments on the proposal to set annual fees on a per-megahertz basis for licensed spectrum.

95WCanSatCo supports a fee structure calculated on a per-megahertz basis, which 95WCanSatCo strongly believes encourages more efficient use of spectrum.

3-3 Industry Canada is seeking comments on the following rates for each applicable band, as described in Annex A:

- **Level A** — $112 per MHz for C band, extended Ku band, X band, other Ka band and NGSO satellite systems.
- **Level B** — $152 per MHz for Ku band not shared with terrestrial service, extended Ka band and BSS bands.
- **Level C** — $176 per MHz for Ka band spectrum not shared with terrestrial services.

While 95WCanSatCo applauds Industry Canada’s attempts to align a fee structure with the lower global market rates and a simpler licence regime, 95WCanSatCo believes that the proposed rate card is still too high when combined with other financial burdens that exist in Canada. The additional financial burden per ‘payload’ from the public benefit levy is typically $1000/MHz ($1M/year/payload from 2% of gross revenues); therefore, when combined with the continued public benefit levy the proposed rates are too high.

95WCanSatCo believes that the proposed price spread between the three most popularly utilized spectrum bands (C band, Ku band and 12 GHz BSS) is too large and not equitable based on their current usage and commercial success. C, Ku, and 12 GHz BSS bands are otherwise essentially equal in their longstanding popularity and commercial success; therefore the price difference between Levels A and B is particularly not justified. Alternately, due to its longstanding commercial success, C band should logically be moved into the Level B category.

With respect to the Level C Ka band spectrum rates, we note the widespread use of spot-beam spectrum reuse in Ka band satellites results in the ability to reuse the spectrum multiple times, and therefore effectively deriving a significantly lower overall cost per megahertz. Level C could therefore be increased substantially without undue burden.
Finally, we note that the term “BSS” is used generically for both the popular 12 GHz BSS band, and the emerging 17 GHz BSS band which is still in development and yet to be commercially deployed anywhere in the world. As outlined in greater detail in response to section 3-4, emerging bands have a greater development risk, a longer timeframe to develop and deploy, and a significantly greater expense overall to initially utilize; therefore it is inappropriate to include 17 GHz BSS in the Level B “BSS” rate structure proposed.

3-4 Industry Canada is seeking comments on using spectrum licences for the assignment of emerging bands and on what an appropriate fee level would be for those bands.

95WCanSatCo believes that for licensing consistency a similar assignment process for emerging bands would be appropriate.

By definition, emerging bands have a greater development risk, a longer timeframe to develop and deploy, and a greater expense; therefore the cost and payment of fees during the already significant development process would be onerous. The proposed new fee structure should be modified when applied to new emerging bands, particularly the payment of fees upon issuance of a licence, and should only commence with in-orbit operation. A reduced fee structure should also apply to all emerging bands that have currently been authorized but not yet launched.

With the emerging bands the market value of the spectrum would not normally be established until the band has been in use for some time; so a significantly lower fee per megahertz should be levied. 95WCanSatCo recommends an ‘emerging band’ fee of $76/MHz (50% of the Level B rates) for the first five years after initial commercial deployments in that band. After that time the rate would increase to either Level A, B or C outlined above and as appropriate for that new band.

3-5 Industry Canada is seeking comments on the proposal to make the new fees for existing licences for in-use spectrum effective immediately upon approval of the fee order.

95WCanSatCo supports the proposal to make the new fees for existing licences for in-use spectrum effective immediately upon approval of the fee order.

3-6 Industry Canada is seeking comments on the proposal to introduce the fee for existing approvals for assigned, unused spectrum in 25% increments over a three-year period after the approval of the new fee order.

95WCanSatCo would also note that it is inappropriate for Industry Canada to levy any fees to existing Approvals, as their business plans, financial models, and current budgets do not have any expectation of being levied fees for spectrum that they are not yet able to utilize. Existing approvals for assigned, unused spectrum should be grandfathered without any fees due until a successful satellite launch when an FCFS system is implemented.

3-7 Industry Canada is seeking comments on the proposal to introduce the fee for all new licences immediately upon approval of the fee order.

95WCanSatCo supports the proposal to introduce the fee for all new licenses immediately upon approval of the fee order with the caveat outlined in the comments in response to section 3.1 above that only 33% of the spectrum fees are charged during the three-year development phase.
3-8 Industry Canada is seeking comments on the proposal to set the licence term at 20 years, based on the estimated life expectancy of 15 years for a satellite plus development time.

95WCanSatCo fully supports the stated rationale for a licence term of 20 years.

3-9 Industry Canada is seeking comments on the introduction of a new short-term satellite spectrum licence, on what would be an appropriate term, and on whether a flat fee or calculated fee should be applied.

95WCanSatCo supports the concept of a new short-term satellite spectrum licence. Such a licence would be beneficial in case a temporary service configuration was required prior to a final permanent satellite network being established. As the typical development time for satellite programs is greater than three years, a short-term licence of up to four years would be appropriate for setting the term of a temporary licence.

A flat fee may not be appropriate in the majority of short-term or temporary licence cases (typical examples include spectrum testing, early implementation of new spectrum, BIU of ITU filings, emergency backup, and/or interim facilities). Therefore calculated fees should be left to the discretion of Industry Canada, after weighing commercial viability and application use of the spectrum of the temporary licences when setting those fees.

4-1 Industry Canada is seeking comments on possible changes to the existing public benefit conditions of licence to improve their effectiveness, as well as any new ways in which the obligation could be implemented.

The public benefit requirement has two negative implications for the Canadian market. The first is the overall impact on the global competitive market for satellite operators operating in different federal administrations; and related economic incentives to do business in Canada – or elsewhere. The second is that public benefits are effectively a ‘tax’ burden of roughly $1M annually per satellite which is passed down to capacity users (and ultimately to consumers) in the form of higher costs. The public benefits levy is far more onerous on the satellite operator, and thus the end users, than the spectrum licence fees.

Public benefits should therefore be eliminated from any satellite spectrum-licensing regime, as they are not applied in other spectrum applications. In the event that public benefits remain, Industry Canada and the spectrum licence holders should have discretion as to how those needs are fulfilled on a case-by-case basis based on economic viability of the programs.

4-2 Industry Canada is seeking comments on whether to maintain the public benefit condition of licence for new satellite spectrum approvals.

As noted above, the current public benefit levy is a very onerous burden on licences. Public benefits should be eliminated from any spectrum-licensing regime, as they are not applied in other spectrum applications, thereby making satellite less competitive with alternative distribution methods. In the event that they remain for existing licences and approvals, they should be equally applied to new programs.
5-1 Industry Canada is seeking comments on how best to implement a requirement for minimum Canadian coverage.

The Canadian coverage requirement also has negative implications for the Canadian market similar to those noted earlier for public benefits. The impact on the global competitive market for satellite operators to provide Canadian coverage has direct capital cost implications on satellites, and very strong cost of capacity implications to provide coverage of regions of Canada where the population (users) is sparse and the coverage is rarely economically justified. Additionally, as Industry Canada has witnessed on many unheeded “Calls for Expressions of Interest”, more often than not there is no market for the capacity within Canada at all.

Should Industry Canada elect to maintain some requirement for minimum Canadian coverage, it should be limited to the more densely populated regions of southern Canada for all spectrum applications except those supporting broadband connectivity.

Summary

95WCanSatCo applauds Industry Canada’s attempts to simplify the Canadian licence process and harmonize Canadian licence fees with other global administrations. As a new entrant, our two main concerns are with the proposed fees; the overall fee structure burden when combined with the public benefit levy, and the proposed fees for emerging bands (specifically the new 17 GHz BSS band).

95WCanSatCo hopes its brief comments and recommendations are helpful to Industry Canada in finalizing the new Licensing Framework for FSS and BSS in Canada.

Yours truly,

Brian Olsen
President and COO
95WCanSatCo Canada Inc.