



April 17, 2009

To: Director General, Telecommunications Policy Branch,
Industry Canada,
16th Floor, 300 Slater Street,
Ottawa, Ontario, K1A 0C8

Re: CBC/Radio-Canada's Response to Canada Gazette Notice No. DGTP-003-08 -
Consultation on the Possible Use of the Extended-Ku Spectrum Bands for Direct-to-Home
(DTH) Satellite Broadcasting Services

CBC/Radio-Canada is pleased to respond to Canada Gazette Notice DGTP-003-08. The Corporation commends the Department for moving forward on this important matter for the broadcasting industry.

CBC/Radio-Canada's submission is attached to this letter.

If the Department has any questions on the attached submission, it can contact the undersigned.

Yours truly,

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Attachment: CBC/Radio-Canada's Response to Canada Gazette Notice No. DGTP-003-08 - Consultation on the Possible Use of the Extended-Ku Spectrum Bands for Direct-to-Home (DTH) Satellite Broadcasting Services

**CBC/Radio-Canada's Response to
Canada Gazette Notice No. DGTP-003-08 –
Consultation on the Possible Use of the Extended-Ku Spectrum Bands
for Direct-to-Home (DTH) Satellite Broadcasting Services**

General Comments

CBC/Radio-Canada, as the national public broadcaster, makes relatively extensive usage of existing Canadian satellites operating in the Fixed Satellite Service (FSS) frequency bands, specifically C-Band and Ku-Band for distribution of its radio and television services, as well as for collection, contribution and news gathering.

Presently, CBC/Radio-Canada produces and distributes over 26 TV program streams in standard definition (SD) to provide Canadians with television services with a certain level of regional and local customized program delivery, which takes into account time zones, large markets and provincial capitals. The program delivery system consists of over 660 terrestrial NTSC transmitters fed by the Anik F1R FSS satellite. Recent statistics indicates that over 90% of the Canadian households received their television services via Broadcast Distribution Undertakings (BDUs), such as cable systems and direct-to-home (DTH) systems (i.e. Bell TV in BSS Ku band and Star Choice in FSS Ku band). It worth noting also, that a large number of cable systems are fed via Canadian satellites operating in FSS Ku bands. BDUs (and FSS Ku Band by extension) are therefore a very important part of the overall CBC/Radio-Canada delivery system in reaching all Canadians.

As the broadcasting industry is migrating to digital television (DTV) and television programs are being produced in high definition (HDTV), it is important that there is sufficient FSS Ku-Band spectrum capacity available to Canadian satellite providers to accommodate the significant increase in bandwidth requirements from the broadcasters due to HDTV.

CBC/Radio-Canada current plans for DTV is to continue to produce and distribute 26 TV program streams, in full HDTV. Canadians who will be receiving CBC/Radio-Canada's HDTV program services from DTH service providers, as well as from digital cable systems that are fed via FSS Ku band, should have the possibility to receive HDTV television services with the same level of regional and local customized program delivery. This means that DTH service providers that will use or will be using FSS Ku Band spectrum will require additional Ku Band spectrum to what is available now. For the same reasons, more FSS Ku band spectrum will also be required to feed the cable systems, which makes usage of it to receive their signals. This becomes even more important when we consider that it is unlikely that CBC/Radio-Canada will not have the resources to convert all of its 660+ NTSC transmitters to ATSC (digital), relying more on BDUs to deliver its HD program services.

When considering the above, CBC/Radio-Canada strongly supports the need to change the spectrum policy of the Ku frequency band 10.7 – 11.7 GHz to accommodate the provisioning of DTH services. CBC/Radio-Canada also supports Telesat Canada's proposed usage of the extended FSS Ku Band. CBC/Radio-Canada agrees that part of the additional Ku-band capacity be made available for Shaw as it is needed for Canadian programmers' HDTV delivery, to both cable and to StarChoice's DTH customers (900,000).

A secondary but very important benefit associated with the use of the Extended Ku band by Star Choice is the ability to provide critical in-orbit sparing to the conventional Ku-band satellites operating at the existing orbital positions in the event of a catastrophic failure.

Finally, CBC/Radio-Canada understands and is sympathetic to the concerns of the Fixed Service (FS) industry about the changes to the spectrum utilization policy of the 10.7 – 11 GHz (Ku) frequency band in favor of the FSS. CBC/Radio-Canada is confident that the Department will take into account these concerns in implementing the change and will find appropriate solutions to accommodate the needs of the FS as required.

Answers to Specifics Questions asked by Industry Canada DGTP-003-08

1. (a) The Department seeks comments as to whether the spectrum utilization policy of the Ku frequency band 10.7-11.7 GHz should be changed to accommodate the provisioning of DTH services and, if so, what the designated use for each of the sub-bands should be.

CBC/Radio-Canada supports the submission of Star Choice, Shaw and Telesat that the 10.95-11.2 GHz and 11.45-11.7 GHz portions of the 10.7-11.7 GHz band should be designated for priority use by the Fixed Satellite Service (FSS) to support provisioning of Direct-to-Home (DTH) and broadcast signal delivery services (e.g., SRDU, specialty and pay uplink and specialty and pay signal transport services.)

CBC/Radio-Canada supports the submission of Star Choice, Shaw and Telesat that the FS should have priority over the FSS in the bands 10.7 – 10.95 GHz and 11.2 – 11.45 GHz. Use of the FSS in these bands would be limited to applications that pose minimal constraints on the deployment of the FS.

(b) More specifically, should the designation be as requested in section 3.1 above, namely that the extended-Ku bands 10.95-11.2 GHz and 11.45-11.7 GHz be designated only to the fixed-satellite service, and the bands 10.7-10.95 GHz and 11.2-11.45 GHz continue to be designated to the fixed-satellite and fixed services under the current policy stipulations?

Yes, in accordance with the proposals set out in the response to question 1(a).

If these designations are made as described in 1(b) above:

2. Should they (a) be for a limited duration, and (b) be made conditional on the bringing into use the extended-Ku bands for DTH services within a specified period of time?

The revised Industry Canada spectrum utilization policy for the 10.7-11.7 GHz band should be established on a general and permanent basis.

3. Comments are sought as to the disposition of the current fixed service licensees in the extended-Ku bands. Should they be permitted to continue operating in these bands and, if so, under what conditions?

CBC/Radio-Canada supports the submissions of Star Choice, Shaw and Telesat that the 10.95-11.2 GHz and 11.45-11.7 GHz bands should be designated for priority use by the Fixed Satellite Service (FSS). Three years after issuance of the Department's new spectrum policy to implement the foregoing approach, the operation of fixed service (FS) systems utilizing the bands 10.95-11.2 and 11.45-11.7 GHz should end. Until then, any uncoordinated FSS deployment in these bands would be on a no-protection basis with respect to FS transmitters licensed prior to 2009 (i.e. before the moratorium). Previously co-ordinated FSS receivers should continue to be protected from FS interference.

4. Comments are sought as to whether the future capacity requirements of the fixed service can be accommodated in other fixed service allocations at 6, 15, 18 GHz and the remaining portions of the 11 GHz Ku band. Are these bands suitable and is there sufficient spectrum to accommodate any potentially displaced fixed service systems from the extended-Ku bands?

As mentioned in the General Comments, CBC/Radio-Canada is confident that the Department will take into account the existing and future requirements of the FS in implementing the change and will find appropriate solutions to accommodate the needs of the FS as required.

5. Comments are sought on the coordination requirements with fixed systems in the U.S. and coordination with other FSS systems.

CBC/Radio-Canada concurs with the views of Star Choice, Shaw and Telesat and does not believe that it would be necessary for Industry Canada to seek a new bilateral arrangement to address FS in the U.S.

If these designations are not made as described in 1(b) above:

6. Should consideration be given to authorizing the use of the extended-Ku bands to provide DTH services on a non-standard basis (i.e. receive-only earth stations shall not claim protection from harmful interference from any current and future authorized fixed service stations)?

No, for obvious reasons. Any services intended for the general public, such as DTH, should be fully protected from interference through appropriate regulations.

7. Comments are sought on how the near-term DTH capacity requirements can be met.

CBC/Radio-Canada is a member of the Canadian Broadcast Distribution Association (CBDA) and share the views of the CBDA that it is critically important that DTH consumers be able to access satellite programming that is transmitted in the same range of frequencies and using satellites located in the same orbital neighbourhood. This enables consumers to access their programming services with a single small (60-70 cm) dish antenna. In today's competitive video distribution marketplace, if a DTH operator tried to persuade consumers that they needed two dishes or one larger unwieldy dish, the operator would quickly lose market share since these alternatives are both consumer-unfriendly and more expensive than small dishes. The Star Choice orbital neighbourhood consists of the orbital positions 107.3W and 111.1W, served by the Anik F1R and Anik F2 satellites, respectively. This is where all Star Choice customer antennas are pointed.

CBC/Radio-Canada is of the view that Extended Ku-band is the ideal option for the delivery of new DTH and new broadcast signal delivery services that rely upon the DTH satellite platform.