

Industry Canada

Consultation on Repurposing the 600 MHz Band

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The increased demand for mobile data in Canada requires comprehensive and thoughtful stewardship of the public spectrum. We thank Industry Canada for the opportunity to engage in policy discussions regarding the future direction of this key resource.

Question 2: Let's Talk TV

“Industry Canada is seeking comments on the future spectrum requirements for OTA TV broadcasting, taking into consideration the overall changes to the broadcasting industry, and noting that the CRTC Let's Talk TV hearing recently closed.”

We believe the uncertainty concerning a question central to this consultation, regarding the future of over-the-air (OTA) television, is a clear indicator of the profound challenges brought about by Canada's continued reliance on a bifurcated approach to spectrum policy (in which Industry Canada and the CRTC both play a role). When this consultation was initiated by Industry Canada in December 2014, the CRTC had not announced a schedule for releasing decisions on its Let's Talk TV hearing, decisions that have a clear bearing on this procedure. This 600 MHz consultation was subsequently delayed with many interested parties waiting for CRTC announcements (e.g. Broadcasting Regulatory Policy CRTC 2015-24) before finalizing their positions.

While questions of regulatory authority may be beyond the scope of this consultation, we believe the lack of alignment between this *Consultation on the Repurposing of the 600 MHz Band* and

CRTC decisions on the future of broadcasting in Canada offers a clear example of a dysfunctional national regulatory system and must be recognized and addressed.

We call upon the Canadian government to change the regulatory structure for Canadian communications and place spectrum policy within one regulator, as it is in the United States and Britain.

Question 5: Spectrum Efficiency

The primary design objective of the repurposing of the 600 MHz band for regular power television broadcasting undertakings is to be spectrally efficient (40). We believe Canada has serious deficiencies in this area.

The proposal as currently worded does not encourage the use of signal multicasting, instead continuing the decidedly inefficient use of spectrum that has unfortunately been common in Canada since the digital television transition of 2011. This approach reinforces the consolidation of Canadian television voices and is clearly contradictory to the objective of spectrum efficiency.

The ATSC digital television standard was designed so that multiple channels can be broadcast on one 6 MHz channel, a process known as multicasting (or multiplexing). This is common practice in the United States, where the overwhelming majority of broadcasters offer a multicast signal. According to the FCC Incentive Auction Proposal as of 2010, roughly 70 percent of commercial broadcast television stations multicast their signals (par 16). This is not the case in

Canada where few if any OTA broadcasters use this key element of digital television broadcasting.

Industry Canada's stated purpose is the "promotion of efficient use of the limited radio spectrum by maximizing available capacity" (26). Multicasting offers an option to maximize available capacity for OTA television but the 600 MHz proposal does nothing to encourage further development of this approach in Canada. National regulators can encourage this key benefit of the digital transition.

In the American model that is largely serving as the basis for this Canadian proposal, multicasting is offered as a key strategy for gaining further spectrum efficiencies. The Canadian proposal as written does not recommend the U.S. plan which is clearly designed to encourage the sharing of broadcasting licenses to take advantage of multicasting and thus, gaining greater use and efficiencies from the same 6 MHz license.

The legislative basis for the U.S. incentive auction is found in a section of the Middle Class Tax Relief And Job Creation Act Of 2012 (Spectrum Act). This provides the foundation for the Incentive Auction and explicitly encourages sharing of broadcasting licenses as a way to gain greater spectral efficiencies:

ELIGIBLE RELINQUISHMENTS.—A relinquishment of

usage rights for purposes of paragraph (1) shall include the following:

(A) Relinquishing all usage rights with respect to a particular television channel without receiving in return any usage rights with respect to another television channel.

(B) Relinquishing all usage rights with respect to an ultra high frequency television channel in return for receiving usage rights with respect to a very high frequency television channel.

(C) Relinquishing usage rights in order to share a television channel with another licensee. (Section 6403.2, italics added)

This encouragement of multicasting the signal is given further legislative support and clarification for broadcasting rights:

4) PROTECTION OF CARRIAGE RIGHTS OF LICENSEES SHARING A CHANNEL.— A broadcast television station that voluntarily relinquishes spectrum usage rights under this subsection in order to share a television channel and that possessed carriage rights under section 338, 614, or 615 of the Communications Act of 1934 (47 U.S.C. 338; 534; 535) on November 30, 2010, shall have, at its shared location, the carriage rights under such section that would apply to such station at such location if it were not sharing a channel.

The sub channels offered via multicasting are often avenues for other voices to have access to the broadcasting system. In the US incentive auction, the FCC encouraged sharing licenses as a tool of media diversity: “We envision that such measures might include ways to encourage

multicasting opportunities or other alternative means of program delivery that could help to ensure that consumers will continue to have access to specialized or minority-oriented programming post-auction (Docket No. 12-268, 535)’’.

Canada continues to overlook this essential component of the digital television transition in the United States. Sharing broadcasting spectrum via multicasting does not appear at any point in Industry Canada’s *Consultation on Repurposing the 600 MHz Band*. Multicasting must be encouraged as a condition of license.

We realize that broadcasting licenses are under the auspices of the CRTC but this further supports our point that the current regulatory regime is flawed. To encourage multicasting is to offer a more efficient use of spectrum as well as a more robust and diverse OTA system.

Canadian OTA television regulations must encourage multicasting signals.

Question 8: Remote Rural Broadband Systems

Industry Canada is seeking comments on the proposed transition policy for RRBS.

Industry Canada has placed a moratorium on Remote Rural Broadband Systems applications.

We sincerely hope this will be a temporary measure and we encourage the continued use of this

approach. Rural broadband provision is a challenge in many countries. Through the RRBS Canada uses its abundance of sparsely populated terrain to its advantage to allow access to unused portions of the television frequencies. It is to Canada's credit that since the policy was first implemented in 2006, this method to offer wireless broadband service has been deployed in 83 remote communities. Most of these deployments are by smaller companies, outside Canada's major wireless providers. RRBS an approach to spectrum development that must be given further time to grow and develop.

We support Industry Canada's plan to increase the spectrum range where the channels for RRBS can be reassigned and encourage further development of the RRBS policy.

9.3 TV White Space (TVWS)

The *Consultation for the Repurposing of the 600 MHz Band* observes that there are currently no TVWS deployments in Canada. Since this Consultation was initiated in December 2014, Industry Canada has made a series of announcements regarding the development of TVWS in Canada (<http://news.gc.ca/web/article-en.do?nid=928659>).

We support the further development of TVWS in Canada as a potential avenue for wireless access and encourage further support for initiatives in this new technology.

About Canadian Spectrum Policy Research

Canadian Spectrum Policy Research (CSPR) is a project examining the policy and management of radio spectrum in Canada and around the world. It is based at Ryerson University in Toronto.