



***Submission to Innovation, Science and Economic Development
Canada***

***Consultation on the Technical, Policy and Licensing Framework for
Wireless Microphones***

(Canada Gazette, Part 1, Notice No. SMSE-019-17, November 15, 2017)

c/o Director General, Engineering, Planning and Standards Branch
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Introduction

1. The CAB is the national voice of Canada's private broadcasters, representing the vast majority of Canadian programming services, including private radio and television stations, networks, specialty, pay and pay-per-view services.
2. We appreciate the opportunity to comment on ISED's consultation paper, "*SMSE-019-17 Consultation on the Technical, Policy and Licensing Framework for Wireless Microphones*," on behalf of our members. Our members look forward to participating constructively in this process.
3. This Consultation is closely related to the Department's decisions and potential outcomes of "*SMSE-018-17 – Consultation on the Technical and Policy Framework for White Space Devices*". This submission should be considered in conjunction with the CAB's response to the parallel Consultation regarding White Space Devices.
4. CAB members will be acutely impacted by the Government of Canada's 600 MHz repurposing initiative. The severity of these impacts and the need for reimbursement, as a direct result of repurposing the 600 MHz Band, are well documented in the CAB's Response¹ to SLPB-005-17 Consultation on a Technical, Policy and Licensing Framework for Spectrum in the 600 MHz Band².
5. The CAB Technical Coordinating Committee (TCC) participated greatly in the development of the Radio Advisory Board of Canada (RABC) response to this Consultation. The TCC submits the following additional comments to the questions outlined in the Consultation.
6. The CAB supports the positions submitted by the RABC in regard to questions 1, 2, 3A and 4 of the Consultation.
7. The CAB submits the following additional comments in response to question 3B of the Consultation.

Q3. ISED is seeking comments on its proposal to allow wireless microphones to access the broadcasting bands (54-72 MHz, 76-88 MHz, 174-216 MHz, 470-608 MHz), the duplex gap (652-663 MHz) and the guard band (614-617 MHz) on a licence-exempt basis, and the voluntary licensing of eligible users' wireless microphones.

¹ [https://www.ic.gc.ca/eic/site/smt-gst.nsf/vwapj/SLPB-005-17_comments_CAB.pdf/\\$file/SLPB-005-17_comments_CAB.pdf](https://www.ic.gc.ca/eic/site/smt-gst.nsf/vwapj/SLPB-005-17_comments_CAB.pdf/$file/SLPB-005-17_comments_CAB.pdf)

² <http://www.ic.gc.ca/eic/site/smt-gst.nsf/eng/sf11316.html>

B. Should ISED consider a licence-exempt approach for wireless microphones within the broadcasting or 600 MHz bands (614-617 MHz and 652-663 MHz)?

8. The CAB recommends that the Department should permit licence exempt and voluntary licensing of WMs in any and all spectrum where both WMs and White Space Devices (“WSDs”) are allowed to operate.
9. The CAB supports the Department’s proposal to designate the 600 MHz bands (614-617 MHz and 652-663 MHz) exclusively for the use of WMs. Broadcasters are in favour of restricting WSDs from these sub-bands so that a licence exempt approach can be used. It is expected that these sub-bands will be utilized for news gathering purposes where deployment will occur on a moment’s notice and registration of the location in the WSD database will be highly impractical.
10. It should be noted that some existing WM equipment is narrow band and may not be possible to retune to other portions of the 600 MHz Band or outside of the Band. It is also not clear at this time whether existing WM equipment meets the proposed technical rules or certification requirements for use in the bands 614-617 MHz and 652-663 MHz.
11. Private broadcasters will bear the brunt of repurposing the 600 MHz Band. The CAB estimates that the cost to displace member television stations out of the 600 MHz Band will exceed \$106 million. In addition, it is estimated that mandatory transition costs for public, educational and low power broadcasters would exceed \$10 million.
12. The above cost estimates do not include the cost of replacing narrow band WMs that also now face displacement from the 600 MHz Band.
13. Unlicensed wireless microphones, cameras and intercom equipment (“WMs”), have become an integral part of radio and television station operations because of their flexibility and rapid deployment for news gathering, special events and in-studio uses. When television stations were required to vacate the 700 MHz Band, WMs, cameras and intercoms, also in the 700 MHz band, became obsolete. Broadcasters were thus required to make substantial investments of millions of dollars to replace wireless equipment displaced from the 700 MHz Band. Much of that new equipment operates in the 600 MHz band. When mobile services are deployed in the 600 MHz Band, broadcasters will be required to abandon these investments and, again, purchase new equipment costing millions of dollars more. One television group alone spent \$1 million to replace 700 MHz WM equipment and now estimates over \$1.6 million to replace 600 MHz equipment.
14. The cost of replacement wireless microphones, cameras and intercom equipment should therefore be reimbursed to radio and television broadcasters.

15. It will be a number of years until the 600 MHz Band begins to be deployed by mobile services. Mobile services may not be deployed until after the completion of the Digital Television (DTV) Transition Schedule, four years from now. Hence there is no risk of interference if unlicensed WMs are permitted to continue operation for quite some time.
16. ISED should rescind or modify SAB-003-17 [Low-power Radiocommunication Devices, Including Wireless Microphones, in the Band 614-698 MHz](#) to allow existing unlicensed WMs to continue to operate for as long as possible until mobile services are actually deployed several years from now in each region of the country.