



***Sent via Email***

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**Re: Comments of the Canadian Association of Broadcasters with respect to  
Canada Gazette, Part 1, Volume 157, Number 45  
Notice No. DGSO-003-23: Consultation on Amending CPC-2-0-20 — Radio Frequency  
(RF) Fields — Signs and Access Control**

1. As the national voice of Canada's private broadcasters, representing the vast majority of Canadian programming services, including private radio and television stations and networks, the Canadian Association of Broadcasters (CAB) is pleased to submit its response to the Department in regard to the above named Public Consultation.
2. Section by section proposals, comments and recommendations are provided in Appendix A.
3. In addition to preparing its own response, the CAB also contributed to the response filed by the Radio Advisory Board of Canada (RABC). The CAB supports the comments made by the RABC in this Consultation.

**Introduction and Overview**

4. The CAB fully supports and understands the importance of protecting the general public from exposure to radio frequency energy exceeding the thresholds specified by Health Canada. Broadcasters, like all spectrum users, have a responsibility to maintain compliance with Safety Code 6 (SC 6) at all times. Broadcasters take SC 6 issues seriously, diligently ensure compliance, and are not aware of widespread problems.
5. The CAB is concerned that the new access control requirements proposed by ISED are very prescriptive, particularly in regard to the size and style of fencing required. Further, a "one size fits all" solution does not take into account the extreme differences between broadcasting transmission sites across the country.

6. We are also concerned about the significant and disproportionate costs associated with implementing the new guidelines and the time it will take to bring sites into compliance. AM transmitter sites will be particularly impacted because of very large properties and multiple transmission towers. At many sites, the amount of fencing to be replaced will be extensive, resulting in massive costs in a short period of time, and even the possibility of some stations shutting down altogether.

### **The proposed measures are disproportionate**

7. The CAB recognizes the critical importance of maintaining safety at transmission sites. However, cost estimates illustrate that the proposed measures may be excessive and more than is actually necessary to protect the general public.
8. In fact, in the majority of locations, we are not aware of any safety concerns. Some stations have operated for over sixty years without an incident. An Access to Information Request to ISED indicated there are no records on file of public complaints regarding radio and telecommunication towers exceeding Safety Code 6. A copy of the response letter from ISED is attached as Appendix B.
9. It is not clear what specific problems have been encountered by Department staff. The Department has stated that the proposed new requirements are a result of broadcasters asking the Department for specific direction on what access controls are required. It is more accurate to say that broadcasters will sometimes ask “What will the Department accept?” or “Will the Department accept this proposal for my site?” to reflect the wide variation in conditions from site to site.
10. Broadcasters have also looked to the Department to ensure consistent application and enforcement of rules in the regional and district offices across Canada. It is easy to appreciate that this is a challenging task in such a vast nation and with such extreme differences between transmission sites across the country. However, broadcasters have not asked for more stringent and costly requirements which have the impact of raising the bar at all sites.

### **A One-sized fits all approach is not appropriate**

11. No two broadcasting transmission sites are the same. There is huge variation in the local conditions from site to site whether they be AM, FM or TV. Some sites are in dense urban locations utilizing building roof tops. These sites are often shared with multiple broadcasters and other radio-communication services. Other sites are in rural environments with tall towers in farmer’s fields. Other sites are in remote areas with extremely rugged terrain or on mountain tops.<sup>1</sup> Site access can be extremely challenging, sometimes only by helicopter. It is not practical to have one set of rules for all sites and locations. The prescriptive details of the size and style of fencing and gates listed in section A.7.3 are impractical to install at some transmitter sites and inappropriate at others.

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<sup>1</sup> We have attached sample photographs of various sites as Appendix C.

12. AM transmitter sites in particular are different than FM radio and television sites. AM sites are typically in large fields covering many acres of land with multiple towers. Some properties are larger than 100 acres in size. The costs of fencing the perimeter, the towers and the tower guy anchors are enormous.
13. Broadcasters know from decades of experience that if someone wants to trespass on a site, whether it is for theft, vandalism, hunting or recreation, they will find a way regardless of signage and barriers. Storms and other weather events can also damage fencing and other access controls without warning. Broadcasters may not be immediately aware and may not discover damage until the next site visit. This is especially challenging with sites in isolated remote locations.
14. The CAB recommends that the dimensional specifications for chain link and wooden fences in section A.7.3 should be changed to recommended targets instead of requirements. Otherwise, the extreme differences in site conditions between urban, rural, remote, shared and rooftop transmission sites will create many needs for exceptions to be granted by the Department.

#### **Changes will take time to complete**

15. ISED's proposal is inconsistent. It acknowledges that existing sites are compliant yet raises the bar such that many sites will immediately become non-compliant.
16. Further, if changes are deemed necessary, then a significant amount of time is required to complete the construction work. There are various project stages of planning, design, approvals, permits, hiring contractors, delivery of materials, installation and commissioning. In some instances, sophisticated measurements are needed to demonstrate compliance with Safety Code 6. Each stage of the project takes time, and each stage has its own risks of time delays. Remote sites require even more time to coordinate and complete.
17. Add to the above that seasonal delays or weather events can cause even longer delays in completing the construction of fencing, gates, signage and other access controls.
18. It will also take considerable time for some broadcasting groups which operate multiple sites across the country. Some broadcast groups have identified dozens of sites that will be impacted, which compounds the challenges to complete work. They cannot all be upgraded at the same time. Site upgrades will have to be prioritized. Out of necessity, the work at some sites will not begin until construction is completed at other sites.
19. Further, the CAB understands that new stations and major changes may warrant an upgrade to the new (recommended target) requirements in A.7.3, but the CAB recommends that the Department should not impose a seven year deadline for all sites to upgrade. Over time, improvements can and will be made when changes to facilities take place. This approach would be similar to upgrades to construction building codes. The new building codes do not apply to existing conditions. This approach will protect the general public because existing stations are compliant and will at a minimum meet the conditions of A7.2.
20. Instead, the Department should use that period to collect information on best practices and track the number of incidents or issues that arise, if any.

21. In addition, a process for appeal and requests for time extensions will be needed to address specific situations which may arise if there is a different interpretation of access control requirements between regions.
22. The CAB recommends that the Department provide maximum flexibility in regard to the time required to make changes to access controls. Construction projects often run into delays, which are compounded further by seasonal and weather restrictions. Broadcasters cannot complete multiple projects simultaneously and will need to prioritize work and resources. And, it would be unreasonable to spend tens or hundreds of thousands of dollars to upgrade a site where it could be foreseen to undergo further change or shutdown in a short period of time.

### **The Timing is Out of Step**

23. The proposed introduction of dramatically more stringent access controls by ISED at this time is completely out of step with Health Canada and the CRTC.
24. The safety limits for human exposure to radiofrequency (RF) fields are published by Health Canada in “Safety Code 6; *Limits of Human Exposure to Radiofrequency Electromagnetic Energy in the Frequency Range from 3 kHz to 300 GHz*”<sup>2</sup>. The development as well as any revision to the guidelines for protection of the general public is the sole responsibility of Health Canada. The safety limits, as related to broadcasting transmission sites, have not changed since 2015. If changes are made to those limits in the next few years, broadcasters may be forced to make additional modifications to their transmitter sites, over-and-above any changes that may be required in light of ISED’s new guidelines.
25. As elaborated on further below, the broadcasting industry is financially in dire straits. It would be more appropriate to re-evaluate the need for changes to access controls when Health Canada re-affirms or updates the safety limits in Safety Code 6. For example, a potential change in Safety Code 6 safety limits could require some stations to relocate new fencing.
26. Further, the CRTC has announced a two year moratorium on radio applications.<sup>3</sup> If ISED’s proposed guidelines impose too heavy a burden on existing sites, radio operators may wish to change their technical parameters instead. However, they may be reluctant or unable to change access controls if they cannot to also apply to the CRTC for a change of technical facilities.

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<sup>2</sup> <https://www.canada.ca/en/health-canada/services/publications/health-risks-safety/limits-human-exposure-radiofrequency-electromagnetic-energy-range-3-300.html>

<sup>3</sup> *Change to the processing time for applications and complaints relating to radio undertakings*, Broadcasting Information Bulletin CRTC [2023-278](#), 22 August 2023.

### Undue Impact on Radio and Television Broadcasters

27. The CAB has collected cost estimates from its members to implement the access controls in the proposed new requirements. Based on data from 15 broadcast groups, both large and small, the total aggregate costs are approximately \$17 million. Not all CAB member stations provided cost estimates, but we believe this is a representative sample. In total, costs estimates were collected for 769 AM, FM and TV stations. Some stations would not require any upgrades while others would have very significant costs. The costs for individual AM sites range between \$500 and \$960,000 per site. The total cost for 93 AM stations is \$12.5 million. In some cases, these costs are so prohibitive that some stations would be at risk of shutting down.
28. For broadcasting groups with multiple stations there will be a knock on effect of excessive costs for access controls. Other important investments and equipment will need to be deferred. The impacts will especially affect the broadcasters serving smaller communities.
29. The business and operating environment for radio and television stations in Canada has changed considerably over the last decade, and the pace of change is accelerating quickly. In the face of unprecedented competition for content, audiences, and advertising dollars from unregulated online providers, the private radio and television sectors are facing significant structural, even existential challenges.
30. For television, Statistics Canada data indicate that almost three-quarters of private conventional television stations had negative profitability in 2022. As a whole, the sector had a negative PBIT of \$344 million. Private conventional television has had a 10-year cumulative loss of \$1.68 billion.
31. Revenues in the radio sector have also declined significantly, from a high of \$1.6 billion in 2013 to less than \$1.1 billion in 2022, and PBIT has declined from 17.1% in 2019 (the last full year before the pandemic) to 5.4% in 2022. The private AM sector has suffered most, showing a loss of 10% in 2022. In fact, our analysis identifies 167 radio stations as “at risk” of shutting down given profitability levels lower than negative 20%.
32. With significantly declining revenue and profitability, just since 2017, CAB members have shut down ninety radio and television transmitters because they are no longer financially viable. This has resulted in the loss of news and entertainment to the communities they served, and especially affects smaller communities. The high cost of the proposed access control measures will cause even more stations to shut down.

### Conclusion

33. In light of the above, the CAB respectfully requests that ISED identify the fencing requirements set out in section A.7.3 as targets, rather than strict requirements, adjust the deadlines for implementation, identify a process for appeals and requests for extensions of time, and adopt the proposed section-by-section changes set out by the CAB in Appendix A.
34. We would be happy to meet with you to provide additional details or to answer any questions you may have.
35. All of which is respectfully submitted.

Yours sincerely,

A handwritten signature in black ink, appearing to read 'K. Desjardins', with a stylized flourish at the end.

Kevin Desjardins  
President

**Appendix A**  
**Section by Section Comments and Recommendations**

| Section (changes underlined in bold)   | Comments/rationale  |
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| <p>A3. Definitions</p> <p>The CAB supports the addition of definitions to Issue 2 of the document.</p>   | <p>Note that “<b>stakeholder</b>” and “<b>site owner/manager</b>” appear in A.5, paragraph 4 but are not defined.</p>   |
| <p>A5. Responsibility</p> <p>Paragraph 1 states, <i>“it is the responsibility of all operators to ensure the sites on which their antenna installations reside comply with the UE limits at all times in areas accessible to the general public. Site compliance is based on the maximum possible RF energy levels for the entire site, including the combined effects of nearby installations within the local radio environment, not only the operator’s own installation.”</i></p> <p>The CAB recommends that the second sentence of paragraph 2 should be reworded as follows:<br/><i>“As part of this shared responsibility, each operator is <del>expected</del> <b>required</b> to openly share their system installation parameters and work cooperatively with other operators to ensure accurate and consistent analysis.”</i></p> <p>The next sentence should be reworded as follows:<br/><i>“The implementation of appropriate mitigation measures should be coordinated amongst the non-compliant <b>operators and</b> site stakeholders as appropriate”.</i></p> | <p>For this to work, the Department must have a means for providing contact information for nearby installations on request. Further, it would be necessary for the Department to not authorize new stations near to existing operators without notification as this may throw an existing operator out of compliance.</p> <p>On occasion, broadcasters have had difficulty confirming site compliance because other operators on or near the site have not provided their operating parameters in a timely manner.</p> <p>In Section A.3, a Proponent and/or Operator is defined as follows; <i>For the purpose of this document a proponent or operator will be referred to as an “operator”.</i></p> |

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| <p>Section A.5 paragraph 4:<br/> <i>“ISED requires that, at each site, stakeholder contact information be available to personnel authorized to be within the RAA. Each operator at the site is responsible for ensuring the site owner/manager has their up-to-date contact information (see annex A.A) in order facilitate the timely resolution to any issues found. Where applicable, contact information for any landlord, property manager, and/or third-party tower owners should also be included with the information referenced above. For some types of antenna installations (e.g. those mounted on lamp posts, sign posts, or walls), a typical RAA area (e.g. a locked rooftop) may not exist, therefore the requirement to provide contact information in the same manner may not be practical. In such cases, operators are responsible for <del>ensuring</del> <b>providing</b> the owner/manager of the particular infrastructure <del>has</del> <b>with</b> their up-to-date contact information”.</i></p> <p>The last sentence of the last paragraph of Section A5 should be reworded as follows, <i>“Operators should <del>take responsibility for making appropriate arrangements</del> <b>make appropriate arrangements</b> with the owner(s) of the property on which their antenna installation is located (e.g. farm field or building) so that the property owner(s) is made aware of the risks of over-exposure within an RAA and can effectively avoid such risks”.</i></p> | <p>The CAB agrees that up to date contact information for all operators and personnel authorized to be within the RAA of a site should available, but only within the RAA or by electronic means that is private and secure.</p> <p>The terms “stakeholder” and “site owner/manager” need to be defined.</p> <p>Operators can only be responsible to give contact information to the owner/manager, but cannot ensure the owner/manager retains it.</p> <p>The CAB recommends that the “<b>Contact information template</b>” in Appendix A.A should be a representative sample of the type of information to be included.</p> |
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| <p>A7. Access control requirements</p> <p>Paragraph 4: <i>“<del>Should</del> <b>When</b> an operator is required to implement access controls at a site where none exist, those access controls <del>must</del>, <b>should</b>, at a minimum, meet the requirements outlined in section A7.3 below.”</i></p> <p>The second highlighted Note in a.7: <i>“<b>With some exceptions</b>, ISED does not <b>generally</b> accept vegetation as access control as it is difficult to predict and control.”</i></p> <p>Paragraph 5 in A.7: <i>“Where <del>reconstruction</del> <b>replacement</b> of access controls occurs, the new controls must meet, or exceed, the requirements outlined in section A7.3.”</i></p> <p>A.7.1 Physical Barriers</p> <p>Paragraph 2: <i>“It is important to note that, <b>with some exceptions</b>, ISED does not <b>generally</b> accept vegetation (e.g. dense brush/forest) as a means of access control.”</i></p> <p>A7.2 Existing access controls</p> <p>Third bullet: <i>“The height of the fence/barrier must inhibit an individual from <b>easily</b> passing over it”.</i></p> | <p>The change in wording is more understandable, and sets the obligation as a guideline, rather than a strict requirement.</p> <p>In some instances, the amount and/or density of vegetation is extreme and cannot be crossed even by site personnel. In these specific situations, it is extremely unlikely that the general public would attempt to access such an area. Natural barriers of this type do not change any more rapidly or drastically than a fence that is damaged or downed by a storm.</p> <p>The term reconstruction is unclear and the requirement to meet the standards set in section A.7.3 should not apply to repairs or minor modification of existing access controls.</p> <p>As discussed above in A.7.</p> <p>Any fence/barrier can be breached if a person has strong intent. Existing access controls should ensure that it is clear to the general public that passing over the fence/barrier is prohibited.</p> |
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| <p>Sixth bullet:<br/> <i>“Gates, moveable barriers, and other access points <del>must, at a minimum,</del> <b>should generally</b> meet <del>all</del> of the same requirements as other parts of the access controls. For example, a gate <del>must</del> <b>should generally</b> be <del>of at least</del> the same height <del>as,</del> and <del>have a</del> ground clearance <del>no greater than,</del> <b>as</b> the surrounding fence/barrier <b><u>unless there are extenuating circumstances.</u></b>”</i></p> <p>Seventh bullet; <i>“Any other <b>authorized</b> personnel accessing the RAA must, working in conjunction with operator personnel (who may or may not be present on site), ensure the access points are locked or that general public access is restricted in an alternate manner at all times.”</i></p> <p>A.7.2 Recommendations and considerations<br/> <i>“Conductivity of <b>physical</b> access controls must be given due consideration, most notably at AM broadcasting sites.”</i></p> <p>A7.3 Construction of new access controls:</p> <p>General Requirements<br/>                 Second bullet:<br/> <i>“<del>Proper monitoring</del> <b>Periodic inspection</b> and maintenance of all conductive materials must occur to ensure corrosion does not result in a loss of grounding, which could result in a build-up of contact currents or induced currents.”</i></p> | <p>For existing access controls, there should be flexibility to continue to use existing access controls where they provide an adequate barrier to the general public. For example, in a remote location with rocky terrain, a 1.5 m. gate with 100 mm. ground clearance may be an adequate barrier, even if the surrounding fence may be higher.</p> <p>Minor clarification.</p> <p>Minor clarification.</p> <p>Continuous monitoring is impractical</p> |
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| <p>Seventh bullet:<br/> <del>“Maximum separation between the ground and bottom of the access controls (in all locations) must not exceed 55 mm. The design and construction must be such that access, including by children, cannot be gained by going under the access controls without physically removing a significant amount of material from the ground.”</del></p> <p>Ninth bullet:<br/> <del>“<b>Where possible</b>, gates, moveable barriers, and other access points must, <del>at a minimum</del>, meet all of the same requirements as other parts of the access controls. For example, a gate <del>must be at least</del> <b>should have</b> the same height <del>as</del>, and <del>have a</del> ground clearance <del>no greater than</del>, <b>as</b> the surrounding fence/barrier.”</del></p> <p>Tenth bullet:<br/> <del>“The maximum spacing between gates and supporting posts must not allow a spherical object of greater than 105 mm to pass through or between, and should be constructed in such a manner so as to impede climbing.”</del></p> <p>Eleventh bullet:<br/> <del>“Access points (e.g. gates, doors, other moveable barriers) comprising part of the access control measures must be locked at all times unless operator personnel are present at the site and are able to prevent general public access to the RAA. Any other <b>authorized</b> personnel accessing the RAA must, working in conjunction with operator personnel (who may or may not be present on site), ensure the access points are locked or that general public access is restricted in an alternate manner at all times.”</del></p> | <p>A ground clearance of 55 mm. will not be achievable in <b>100% of</b> locations.</p> <p>Equal height and ground clearance will not be practical in 100% of locations. This should be a target, recommendation or expectation, not a firm requirement.</p> <p>Specific dimensions should be moved to targets/recommendations, not firm requirements.</p> <p>Minor edit.</p> |
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| <p><i>Chain-link fence <del>requirements</del><br/><b><u>recommendations and considerations:</u></b></i></p> <p><i>“Fencing mesh should be located on the outside <b>(PAA side)</b> of the support posts.”</i></p> <p><i>Wood fence (vertical boards)/Wood barrier <del>requirements</del><br/><b><u>recommendations and considerations:</u></b></i></p> <p><i>“Horizontal rails must not be less than 38 mm by 88 mm (nominal 2”x4”) and must be spaced such that the top and bottom rails are at least 1.2 metres apart <b>on the RAA side.</b>”</i></p> <p><b><i>Rooftop requirements:</i></b><br/>First bullet:<br/><i>“Any other <b>authorized</b> personnel accessing the RAA must, working in conjunction with operator personnel (who may or may not be present on site), ensure the access points are locked or that general public access is restricted in an alternate manner at all times.”</i></p> <p><i>A9.1 Temporary measures</i></p> | <p>The specifics related to chain link fences should all be targets/recommendations, not firm requirements.</p> <p>Minor clarification.</p> <p>The specifics related to wood fences should all be targets/recommendations, not firm requirements.</p> <p>Minor clarification.</p> <p>Minor edit.</p> <p>Should temporary changes to operating parameters (e.g. power reduction) be necessary to ensure compliance at shared sites, support from the Department may be needed to ensure the mitigation measures are appropriate. In some instances, a “last on, first off” principle may be applicable to protect incumbent operators.</p> |
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