

**Title:** Draft Market Surveillance Procedure

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**Purpose:**

For information and/or comments.

**DRAFT**



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Spectrum Management and Telecommunications

Internal Procedures Circular

# Procedure for Market Surveillance of Radiocommunication and Telecommunications Equipment

Aussi disponible en français –

Canada 

## Preface

Internal Procedure Circulars are issued for the guidance of departmental staff. The information contained in this circular is subject to change without notice. This document specifies the procedure for market surveillance of radio and telecommunications equipment.

Comments and suggestions may be forwarded to:

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Attention: (DGEPS)

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## **I Intent**

1. It is the responsibility of manufacturers, importers, distributors and vendors to ensure that new products imported into Canada and/or deployed in the Canadian marketplace comply with Industry Canada regulations. As the regulating authority, the department continuously monitors product compliance.
2. The intent of this document is to describe the department's market surveillance procedures carried out by the Certification and Engineering Bureau (CEB) to verify the compliance of radio and broadcasting equipment and telecommunications apparatus (Industry Canada regulated equipment):
  - with established technical standards in accordance with the *Radiocommunication Act* and the *Radiocommunication Regulations*; and,
  - with established technical specifications and markings in accordance with the *Telecommunications Act* and the *Telecommunications Apparatus Regulations*.
3. This document also describes the fundamental role of manufacturers, certification bodies and other responsible parties in ensuring continuous compliance of radiocommunication and telecommunications equipment through declarations of conformity, certification of compliance and market surveillance activities.
4. An overview of the Canadian conformity assessment process, "Canada's Conformity Assessment Regime," is available on the Industry Canada website.<sup>1</sup>

## **II Definitions**

**"CEB"**: Industry Canada Certification and Engineering Bureau.

**"Certificate"**: A document indicating compliance with applicable technical standards for purposes of sections 21(1)(b) and (c) of the *Radiocommunication Regulations*. In particular, a Technical Acceptance Certificate (TAC) is a certificate issued by the Minister of Industry under subparagraph 5(1)(a)(iv) of the *Radiocommunication Act*.

**"Certification"**: The procedure by which a recognized certification body or the CEB gives written assurance that a product, process or service conforms to specified requirements.

**"Category I Equipment"**: Radio equipment subject to technical regulations for which certification is required, such as cordless phones and cell phones.

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<sup>1</sup> An overview of Canada's Conformity Assessment Regime is available on Industry Canada's external Mutual Recognition Agreement/Arrangement website: [www.ic.gc.ca/MRA](http://www.ic.gc.ca/MRA).

**“Category II Equipment”**: Radio equipment subject to technical regulations for which certification is not required, such as Global Positioning Systems (GPS) receivers, and DVD players.

**“Certification Body”** or **“CB”**: A recognized independent organization which conducts certification of radio equipment for sale in the Canadian marketplace.

**“Certificate/Registration holder”**: For the purpose of this document, Certificate holder includes holders of radio equipment certificates issued by a recognized certification body or the CEB. Registration holder refers to the holder of the registration of telecommunications apparatus.

**“Class II Permissible Change”**: A Class II permissible change includes those modifications in the radio equipment which *do* change the electrical characteristics beyond the rated limits established by the manufacturer and accepted by Industry Canada for its certification, *without* violating the requirements of the applicable standard. A Class II permissible change requires notification to Industry Canada. This is defined in RSP-100, Radio Equipment Certification Procedure.

**“Declaration of Conformity”** or **“DoC”**: The procedure by which the manufacturer or supplier has the telecommunications apparatus tested by a testing laboratory recognized by Industry Canada, and gives written assurance that the apparatus complies with applicable technical specifications and markings.

**“Device”**: For the purpose of this document, device is a single unit of equipment with a unique serial number assigned by the applicant.

**“Equipment”**: For the purpose of this document, equipment is a product with a unique model number assigned by the applicant.

**“MRA”** or **“Mutual Recognition Agreement/Arrangement”**: The framework agreement that facilitates trade by streamlining conformity assessment procedures for a wide range of telecommunications apparatus and radio equipment. This is done by providing for the mutual recognition by the importing parties, of the competence of conformity assessment bodies and the acceptance of their test reports and certifications which show that a product conforms to the requirements of the importing party.

**“Other Government Departments”** or **“OGDs”**: Other Federal Government Departments in Canada, such as Health Canada.

**“Radio Equipment”**: For the purpose of this document, radio equipment means radio apparatus, broadcasting equipment, interference-causing equipment or radio-sensitive equipment (as defined in the *Radiocommunication Act*).

**“Radio Equipment List”** or **“REL”**: A list of radio equipment that have been certified for use in Canada. This list is maintained by Industry Canada.

**“Recognition”**: A process by which Industry Canada accepts an independent organization as competent to test and/or certify to Canadian requirements.

**“Regulatory limit” or “RL”**: The upper or lower bounds for a specific technical requirement to be adhered to by equipment, as defined in the Radio Standards Specification (RSS) documents, Compliance Specification (CS-03) document, Interference Causing Equipment Standards (ICES) documents, and Broadcasting Equipment Technical Standards (BETS) documents.

**“Responsible Party”**: A generic term for an entity such as the certificate holder, manufacturer, testing laboratory, certification body, supplier, distributor, service provider or importer that is responsible for a registered and/or certified telecommunications apparatus or radio equipment. The responsible party is the party which responds to inquiries, provides test samples, test reports, and/or quality control data upon request by the department.

**“Specific Absorption Rate” or “SAR”**: A measure of the rate at which radio frequency (RF) energy is absorbed by the human body when exposed to a radio-frequency electromagnetic field. It is defined as the power absorbed per mass of tissue and has units of watts per kilogram (W/kg).

**“Terminal Equipment List” or “TEL”**: A list of telecommunications apparatus that have been registered for use in Canada. This list is maintained by Industry Canada.

**“The Acts”**: The *Radiocommunication Act* and the *Telecommunications Act*.

**“The Regulations”**: The *Radiocommunication Regulations* and the *Telecommunications Apparatus Regulations*.

### **III Mandate**

5. Industry Canada conducts market surveillance, on a sample basis, of telecommunications apparatus and radio equipment, referred to as Industry Canada regulated equipment, with respect to applicable Industry Canada requirements promulgated under the *Acts* and associated *Regulations*.
6. The Spectrum/Telecom Program directly contributes to Industry Canada's broader mission of facilitating the development and use of world-class information and communication technologies and services. While the program draws on a number of instruments, its regulatory basis is firmly rooted in legislation - the principal Acts being the *Radiocommunication Act* and the *Telecommunications Act*.
7. Industry Canada's responsibility to carry out market surveillance activities is linked to Section 4 of the *Radiocommunication Act*, where the distribution, lease, offer for sale, sale or importation of any radio equipment for which technical standards have been established, are prohibited unless the equipment complies with those requirements. A similar provision concerning telecommunications apparatus is given in Section 69.2 of the *Telecommunications Act*.

8. Also, according to Section 5.1(g) of the *Radiocommunication Act* and Section 69.3(1)(e) of the *Telecommunications Act*, the Minister of Industry has the power to test both radio equipment and telecommunications apparatus for compliance with the established technical standards, technical specifications and markings.
9. In addition, the *Radiocommunication Regulations* (Section 24) give the Minister of Industry the authority to have the manufacturer or importer test radio equipment, or make the equipment available for testing at a designated place and time for verification of regulatory compliance.

#### **IV Canada's Conformity Assessment Regime**

10. Industry Canada regulated equipment is required to meet the applicable Industry Canada technical standards, technical specifications and markings. In order for the equipment to be imported and/or deployed in the Canadian marketplace, Category I radio and broadcasting equipment has to be certified, while telecommunications apparatus, Category II radio and broadcasting equipment and interference-causing equipment have to be declared by manufacturers to meet the applicable Industry Canada requirements. The onus is put on manufacturers, certification bodies, and other responsible parties to ensure that the equipment has been certified or declared to comply with Canadian regulatory requirements, is registered with the department and continues to meet the applicable standards during the entire product life cycle. For example, the process for deploying Category I radio equipment in Canada normally involves the following steps:
  - a. a manufacturer designs new equipment;
  - b. the manufacturer or the responsible party tests the equipment or arranges to have it tested by an independent testing laboratory;
  - c. the responsible party submits detailed information on the equipment to a certification body (CB) or the CEB for certification and test reports are provided with the submission;
  - d. the CB or CEB verifies the submission and certifies the equipment to meet applicable requirements;
  - e. the CEB lists the equipment in the REL; and,
  - f. the manufacturer and the responsible party ensure that equipment sold in the Canadian marketplace continues to meet the applicable standards during the entire product life cycle.
11. Industry Canada also allows foreign testing laboratories and certification bodies recognized by Industry Canada through Mutual Recognition Agreements/Arrangements (MRAs) to test and certify Industry Canada regulated equipment on behalf of the department. MRAs are government-to-government arrangements that provide for the mutual recognition by the importing parties, of the competence of conformity assessment bodies (testing laboratories and certification bodies) and the acceptance of their test reports and certifications which show that a product being imported conforms to the requirements of the importing party.

## V Roles and Responsibilities

### Manufacturers, Importers, Distributors and Vendors

12. Manufacturers, importers, distributors and vendors have a legal obligation to ensure that all Industry Canada regulated equipment imported into Canada and/or deployed in the Canadian marketplace has been certified or declared to comply with Canadian regulatory requirements and is registered with the department, before it enters the Canadian marketplace and that equipment sold in the Canadian marketplace continues to meet the applicable standards during the entire product life-cycle. Where testing shows that equipment does not comply with an applicable standard, these entities are responsible for taking prompt and effective remedial action.

### Certification Body (CB)

13. A CB is an independent organization, domestic or foreign, authorized by Industry Canada to certify radio equipment to Canadian regulatory requirements. Foreign CBs are recognized under the terms of Mutual Recognition Agreements/Arrangements. A CB is also responsible for conducting market surveillance on the equipment it certifies and is required to notify Industry Canada immediately if a device fails to comply with the applicable requirements.

### Engineering, Planning and Standards Branch (DGEPS)

14. DGEPS is responsible for developing technical standards for radio and broadcasting equipment and technical specifications and markings for telecommunications apparatus, as per paragraph 5(1)(d) of the *Radiocommunication Act*, and paragraph 69.3(1)(d) of the *Telecommunications Act*. These responsibilities include the market surveillance of Industry Canada regulated equipment for compliance with technical standards. Additionally, DGEPS's mandate includes making a determination of non-compliance for products failing to comply with an applicable technical standard or technical specification or marking established under the *Radiocommunication Act* and *Telecommunications Act*.
15. With respect to limits on radiofrequency exposure, DGEPS sets technical regulatory requirements, based on Health Canada's Safety Code 6, which are published in Radio Standard Specification RSS 102 - *Radio Frequency Exposure Compliance of Radiocommunication Apparatus (All Frequency Bands)*.

### Certification and Engineering Bureau (CEB)

16. The CEB, which is part of DGEPS, carries out some certification of Category I equipment<sup>2</sup> as per paragraph 5(1)(a)(iv) of the *Radiocommunication Act*, and registration of telecommunications apparatus, as per paragraph 69.3(1) of the *Telecommunications Act*. The CEB also conducts market surveillance of Industry Canada regulated equipment to ensure their compliance with Industry Canada's technical standards, technical specifications

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<sup>2</sup> Currently, the CEB certifies less than 5% of such equipment.

and markings. In addition, the CEB maintains a list of Category I certified radio equipment in the Radio Equipment List (REL), and a list of registered telecommunications apparatus in the Terminal Equipment List (TEL). These lists are administrative tools used by the department to keep track of compliant equipment.

17. The CEB ensures that staff is adequately trained to perform market surveillance duties. All equipment used for compliance assessment is calibrated according to internationally recognized calibration standards. The CEB has its own calibration laboratory on site, and conducts equipment calibration as per its accreditation scope to ISO/IEC standard 17025.
18. The SAR system validation, and terminal and radio frequency test equipment calibration are performed on a yearly basis to ensure compliance to the standard acceptability criteria. With regards to SAR, the CEB participates in inter-laboratory comparison studies in order to compare system performance.

### **Spectrum Management Operations Branch (DGSO)**

19. DGSO oversees the issuance of radio authorizations and ensures compliance with the applicable provisions of the *Radiocommunication Act*, the *Telecommunications Act* and related regulations, primarily via the department's regional and district offices.
20. Regional and district offices of DGSO are responsible for delivery of the department's spectrum management program and services to the general public, including: issuance of radio authorizations for radiocommunication systems; resolving radiocommunication interference problems; and enforcement of provisions of the *Radiocommunication Act*, the *Telecommunications Act*, the *Radiocommunication Regulations* and the *Telecommunications Apparatus Regulations*.

### **Communications and Marketing Branch (CMB)**

21. CMB works with departmental staff in the development and implementation of communications approaches that may be required as a result of actions taken in applying these procedures.

### **Health Canada (HC)**

22. Health Canada establishes limits for radiofrequency exposure (Safety Code 6) and when a suspected non-compliance is identified, makes an assessment of health risk.

## **VI Market Surveillance**

23. Market surveillance, as described in this document, is an activity conducted to assess the compliance of regulated equipment deployed in the Canadian marketplace against applicable Industry Canada technical standards, technical specifications and markings during the entire life cycle of the equipment.

24. Market surveillance consists of three components: 1) Targeting, 2) Auditing, and 3) Assessment of Compliance, see Figure 1.0.
25. Targeting and auditing are conducted by the CEB and CBs. The CEB is responsible for the assessment of compliance; however, the onus is put on CBs to work with certificate holders to resolve cases of suspected non-compliance to the extent possible. If the CB is unable to resolve the non-compliance, it is referred to the CEB for resolution.



**Figure 1.0 – The three components of Market Surveillance**

## **VI.1 Objectives**

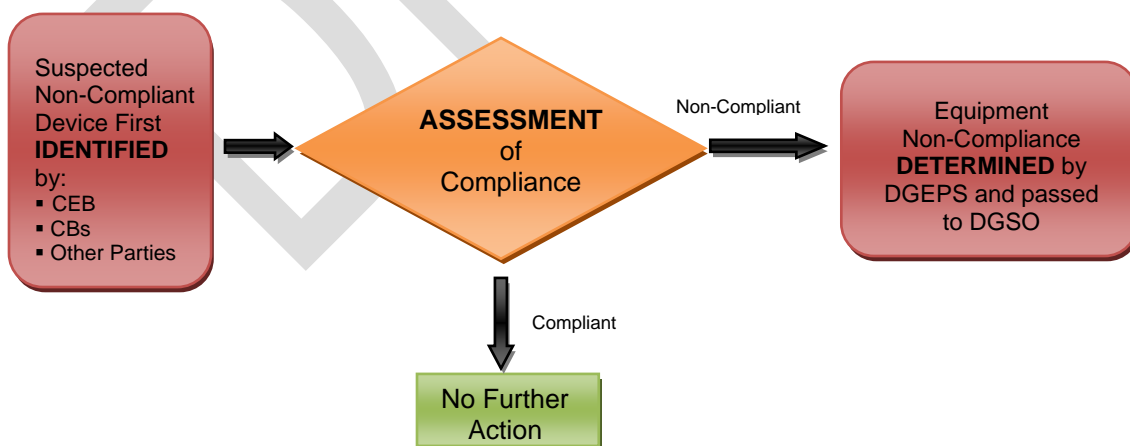
26. Market surveillance is conducted to promote continued compliance of radio equipment and telecommunications apparatus deployed in the Canadian marketplace with applicable Industry Canada regulatory requirements, in order to prevent radiocommunication interference, harm to the Canadian public telecom networks, and to ensure the safety of personnel working on telecommunications facilities and the safety of users.
27. Due to the large volume of radio equipment introduced in the Canadian marketplace every year, Industry Canada allows the certification of radio equipment by private CBs, including international CBs. Less than five percent of radio equipment is certified directly by the CEB. Given the broad stakeholder base, such as manufacturers, testing laboratories, CBs, distributors, importers and users, market surveillance by CBs and additional market surveillance by the CEB, ensures the integrity of the entire process – from manufacturing to deployment.
28. In addition, effective market surveillance will ensure that non-compliance situations are dealt with and resolved earlier in the process, minimizing any potential harm that could result from such situations.

## **VI.2 Overview**

29. Market surveillance is performed through the regular audit of a sample of Industry Canada regulated equipment but can also be incident-driven such as complaints from the public, manufacturers, distributors, service providers, other government departments (OGDs) or agencies.
30. When one or more devices are first found or reported to the CEB as being non-compliant with Industry Canada applicable regulatory requirements (e.g. exceeding the regulatory

limits of an applicable standard or having incorrect equipment labelling), such devices are considered to have been **identified** to be non-compliant. When a suspected non-compliant device is first identified, the CEB's general practice is to work directly with the responsible parties to review the existence, scope and extent of suspected non-compliance of the identified equipment and to resolve such matters as early as possible to minimize any potential harm and/or damage that may result from such non-compliance. The responsible parties may include one or more of the following: the certificate holder, manufacturer, testing laboratory, certification body, vendor, supplier, distributor, and importer.

31. The CEB will follow the process described in the following sections to investigate cases of suspected non-compliant devices to assess compliance or non-compliance. The **assessment** of compliance or non-compliance is conducted by the CEB, following its investigation, of whether equipment meets the applicable regulatory requirements.
32. Figure 2.0 below depicts the sequence flow from non-compliance identification to determination.
33. Should the CEB investigation find the equipment to be compliant, the responsible parties will be notified and no further action will be required.
34. Should the CEB investigation find the equipment to be non-compliant, the Director General of the Engineering, Planning and Standards Branch (DGEPS), will make a **determination** that the Industry Canada regulated equipment is not in compliance with an applicable technical standard, technical specification and/or marking. The case is then passed from DGEPS to the Spectrum Management Operations Branch (DGSO) for appropriate enforcement action, as per IPC-3-24-16<sup>3</sup>.
35. The case file will include the date of transferring, signatures of DGEPS and DGSO, plus the non-compliance report as outlined in related appendices of this document.



**Figure 2.0 – Logical sequence flow from non-compliance identification to determination**

<sup>3</sup> Internal Procedural Circular 3-24-16 (IPC-3-24-16), entitled: *Enforcement Procedure for Radiocommunication and Telecommunications Equipment Determined not to be in Compliance with Applicable Technical Standards*.

## **VI.3 Market Surveillance by the Certification and Engineering Bureau**

36. This sub-section describes how the CEB conducts targeting and auditing as part of market surveillance. The scheme which the CEB uses for assessing compliance is described in Section VII.

### **VI.3.1 Targeting Conducted by the CEB**

37. Targeting is defined as the random selection of Industry Canada regulated equipment from the Canadian marketplace for the purpose of market surveillance based on the criteria in paragraph 39.

38. The CEB targeting scheme for any given year includes the following:

- a. at least five percent of equipment certified by the CEB. Selection of specific equipment is based on an assessment of the potential of the equipment to cause interference, harm to the network or impact to safety of people which are the principal criteria for the radio, telecom and electromagnetic compatibility (EMC) regulations;
- b. at least one percent of equipment certified by the CEB which are subject to radio frequency exposure requirements outlined in Radio Standard Specification 102 entitled *Radio Frequency Exposure Compliance of Radiocommunication Apparatus (All Frequency Bands)* (RSS-102); and;
- c. other equipment not certified by the CEB, such as: radio equipment certified by Certification Bodies recognized by Industry Canada, registered telecommunications apparatus, and Category II equipment. The quantity of equipment targeted will be based on available resource levels at CEB.

39. When selecting a sample, the CEB will take into consideration the following criteria:

- past history of compliance (manufacturers or CBs);
- whether the sample comes from a new applicant (for certification);
- whether the sample is based upon new technology;
- popularity of the technology (mass deployment);
- price of the sample relative to the average price of similar technology; and
- potential harm/impact to network or people due to non-compliance.

40. Samples may be obtained from, for example:

- the manufacturer;
- the Canadian representative of a manufacturer or supplier;
- the importer/distributor; and/or
- the marketplace by either purchasing the sample from a retailer, or inspecting it at the retailer's premises.

### VI.3.2 Auditing conducted by the CEB

41. The CEB will conduct audits in accordance with a DGEPS approved Market Surveillance Plan for the full range of Industry Canada-regulated equipment, for compliance with established technical standards, technical specifications and markings.
42. There are two types of audits that the CEB uses to verify compliance:
  - **Physical audits:** testing of samples to verify compliance with Industry Canada regulations (paragraph 24(1) of the *Radiocommunication Regulations*, and paragraph 4(1)(a) of the *Telecommunications Apparatus Regulations*). All samples selected for auditing are subject to physical audits; and
  - **Desk audits:** technical evaluation of documents submitted to the CEB in support of certification, declaration of conformity, or any other conformity assessment requirements. The CEB also uses desk audits to further investigate cases of non-compliance or to assess if CBs are following the appropriate certification procedures.
43. In addition to these audits, Industry Canada may also conduct investigations resulting from incidents, complaints or information regarding non-compliance from any other party (see Section VI.5).

### VI.4 Market Surveillance by Certification Bodies (CBs)

44. One of the responsibilities of a CB is to conduct appropriate market surveillance activities (targeting and auditing) in accordance with ISO/IEC Guide 65, *General Requirements for Bodies Operating Product Certification Systems*.
45. The targeting and auditing schemes are covered in Industry Canada document CB-02, *Recognition Criteria, and Administrative and Operational Requirements Applicable to Certification Bodies for the Certification of Radio Apparatus to Industry Canada's Standards and Specifications*.
46. CBs are only required to conduct physical audits on selected equipment samples. When selecting an equipment sample, the CB will use the same criteria used by the CEB (see section VI.3.1).
47. The CB targeting scheme consists of the following for any given year:
  - a. Physical audits on at least five percent<sup>4</sup> of equipment certified by the CB; and
  - b. Physical audits on at least one percent of equipment certified by the CB which are subject to radio frequency exposure requirements outlined in Radio Standard Specification 102 (RSS-102), entitled: *Radio Frequency Exposure Compliance of Radiocommunication Apparatus (All Frequency Bands)* (RSS-102).

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<sup>4</sup> Currently, CB-02 document requires CBs to audit a minimum of two percent of total equipment certified by the CB. This minimum requirement will be modified to harmonize with new minimum requirements of this document, which are consistent with the U.S. Federal Communications Commission rules.

48. CBs are required to have a plan that demonstrates how they intend to ensure the minimum audit requirement of equipment certified by the CB will be met. As part of this plan, CBs are required to notify certificate holders of the audit requirement and advise them that they should make provision to always have production samples available upon request by the CB or by the CEB, for auditing purposes.
49. The resolution and reporting to the CEB of an equipment non-compliance identified by a CB are defined in procedures outlined in CB-02. The CEB will monitor this process and attempt to resolve the issue should the CB fail to resolve it satisfactorily.
50. As part of the CB's market surveillance responsibility, a CB is required to notify CEB, at the latest by January 31 of each calendar year, of all audits conducted in the previous calendar year. An annual reminder will be sent from the CEB to all the CBs recognized under the MRA to carry out Canada's regulatory procedures in the areas being addressed in this document.

#### **VI.4.1 Non-Compliance Identified by a CB**

51. CBs are required to work with certificate holders to resolve cases of non-compliance to the extent possible. The process for the CB to deal with non-compliance as a result of an audit is covered in document CB-02. Should the non-compliance case not be resolved, the CB will refer the case to the CEB. The CEB will review the information from the CB with the appropriate technical group in DGEPS, assess the scope and extent of non-compliance, conduct an investigation according to the applicable appendices of this document, and make an assessment of compliance (as per Section VII).

#### **VI.5 Market Surveillance Initiated by Third Party Complaints**

52. The CEB will investigate incidents, complaints or other information received regarding non-compliance such as violation of the SAR regulatory limit, suspected radio frequency interfering equipment, uncertified radio equipment or unlisted telecommunications apparatus. Such investigations may be initiated by regional offices as a result of daily work, e.g. investigating an interference complaint. The investigations may include the following steps for validation of the allegation:
  - Contact the complainant for more information, if necessary;
  - Identify the CB that certified the suspected equipment;
  - Request CB to conduct physical audit of a sample of the same equipment from the marketplace, as required by the MRAs;
  - Specify timeline for reporting results, depending on the type and severity of non-compliance;
  - If appropriate, a physical audit of the suspected non-compliant equipment may be conducted by the CEB; and
  - Make an assessment of compliance (as per section VII).

## **VII Assessment of Compliance Scheme**

53. Assessment of Compliance is the responsibility of the CEB; however, CBs have a responsibility to conduct their own market surveillance program and resolve cases of suspected non-compliance to the extent possible (as per section VI.4).
54. The outcome of every audit is an evaluation of whether the targeted radio equipment or telecommunications apparatus is compliant or non-compliant with established technical standards, technical specifications and markings.
55. Non-compliance scenarios can be of the following types:
  - 1) Non-compliance with departmental technical standards, technical specifications and markings (excluding RSS-102); and
  - 2) Non-compliance with radio frequency exposure requirements (as per RSS-102).
56. When suspected non-compliant equipment is first identified, the CEB will follow the procedures described in the following sub-sections in order to make an assessment of compliance or non-compliance, when applicable.
57. In addition, even equipment found to be compliant with Specific Absorption Rate (SAR) as specified in RSS-102, may be subject to re-assessment (as per section VII.3), if their audit SAR values are above their certified values.

### **VII.1 Non-Compliance with Departmental Technical Standards (excluding RSS-102), Specifications and Markings**

58. Technical standards referred to in this non-compliance scenario include Compliance Specification 03 (CS-03) for telecommunications apparatus, Radio Standards Specifications (RSS) other than RSS-102 for radiocommunication equipment, Interference Causing Equipment Standards (ICES), and Broadcasting Equipment Technical Standards (BETS).
59. The process for assessing non-compliance will be based on the Regulatory Limit and measurement procedures of the related standards.
60. Procedures to be followed by the CEB, from identification to determination of non-compliance with departmental technical standards (excluding RSS-102) are described in Appendix A.

### **VII.2 Non-Compliance with Radio Frequency Exposure Requirements (as per RSS-102)**

61. The technical standard referred to in this non-compliance scenario is the *Radio Frequency Exposure Compliance of Radiocommunication Apparatus (All Frequency Bands)*, RSS-102.

It incorporates the radio frequency exposure limits prescribed in Health Canada's *Limits of Exposure to Radiofrequency Electromagnetic Fields in the Frequency Range from 3 KHz to 300 GHz* (Safety Code 6).

62. All identifications of suspected non-compliant equipment pertaining to Safety Code 6 SAR limits as specified in RSS-102 standard will be reported immediately by CEB to DGEPS and ADM SITT. Health Canada will also be consulted simultaneously.
63. Health Canada is considering development of a risk assessment methodology which would enable us to make the appropriate decision regarding urgency of action in dealing with a SAR non-compliance. Until this methodology is in place IC will continue to seek Health Canada's assessment of the health risk associated with specific cases of SAR non-compliance.
64. When an audit conducted by the CEB or a CB yields results<sup>5</sup> above the Regulatory Limit (RL), and Health Canada advises that it does not pose an imminent health hazard, the CEB will conduct an investigation requiring the responsible party<sup>6</sup> to report to Industry Canada the quality control data from production intervals specified by Industry Canada. The test results of M units (as a minimum, M=5) from the quality control data will be selected by CEB. If quality control data is not available or cannot be used reliably for the purpose in question, the responsible party will be required to test M units (as a minimum, M=5) from the marketplace with product date codes specified by Industry Canada.
65. If the CEB deems that, the data provided is unreliable, samples used do not meet the date requirement or test methods used are not acceptable, CEB will test additional units. This investigation will be conducted in cooperation with the manufacturer, CB and/or other responsible parties to the extent practicable.
66. The outcome of the above investigation will be one of the following:
  - If one or more of M unit(s) has results exceeding the RL, and the CEB establishes that this is not the result of an anomaly, the finding of the assessment is non-compliance.
  - If no unit of M has results exceeding the RL, and the CEB establishes that the original non-compliance identified is a single anomaly among the production units, then the finding of the assessment is compliance.<sup>7</sup>
67. Procedures to be followed by the CEB when handling non-compliance, from identification to determination, with Radio Frequency Exposure Requirements (as per RSS-102) are described in Appendix B.

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<sup>5</sup> Result may be validated by a third party (e.g. Certification Body) as required by CEB.

<sup>6</sup> Responsible party, as defined in the Definitions section, may include one or more of the following: the certificate holder, manufacturer, testing laboratory, certification body, supplier, distributor, and importer. The CEB will make every effort to contact the Canadian representative of the responsible party.

<sup>7</sup> The responsible party will still be required to ensure that the conditions resulting in the anomalous device(s) are not repeated.

68. If the requested quality control data or test results from the marketplace are not sent to the CEB within the timeframe described in Appendix B, then the finding of the assessment is non-compliance and the case will be passed to the Director General DGEPS to make a determination of non-compliance.
69. If Health Canada advises that the initial audit results pose an imminent health hazard, then this becomes priority one for the CEB investigation process. If a CB was the certifier, it will be advised immediately and requested to urgently contact the manufacturer for all relevant data. This will include details on the production run, quality control data, certification value, and a request for a minimum of five samples to be tested for compliance by the CB. The CEB will immediately acquire samples from the Canadian marketplace and commence compliance testing. Compliance/non-compliance determination will then be made in accordance with paragraphs 65-66 of these procedures.
70. As soon as DGEPS determines non-compliance, DGEPS will immediately inform DGSO and ADM SITT. The ADM will immediately inform the Deputy Minister and the Minister.
71. As soon as DGEPS determines non-compliance, the reference to the equipment will be removed from the REL.

### **VII.3 Compliance with Specific Absorption Rate (SAR) in Radio Frequency Exposure Requirements (as per RSS-102) that Requires Re-Assessment**

72. Cases where the audit value for SAR is below or equal to the Regulatory Limit (RL) may be subject to re-assessment (as per RSP-100<sup>8</sup>), depending on where the audit value lies with respect to the submitted SAR value (i.e. certified value) of the equipment at time of certification.
73. The process for deciding whether there is a need for re-assessment is summarized below.
74. When the result of CEB's audit sample is below or equal to the RL, and:
  - If the audit result is above the certified value by more than 22%<sup>9</sup>, the CEB will inform the responsible party of the audit result and request a re-assessment of certification under the Class II Permissive Change requirement as described in the RSP-100 document;
  - If the audit result is below the certified value or within 22% of the certified value, no further action is required.

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<sup>8</sup> Radio Standard Procedure 100 (RSP 100), entitled: *Radio Equipment Certification Procedure*.

<sup>9</sup> This is the approximate measurement uncertainty for SAR testing referred to in IEEE Std 1528.

## ***VIII* Future Updates**

75. This document will be reviewed and amended from time to time to reflect necessary changes in procedural requirements. The department encourages comments and suggestions that will enhance the effectiveness of the document. They may be forwarded to:

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## Appendix A

### **Handling Procedure to be followed by the Certification and Engineering Bureau (CEB) when Non-Compliance with Departmental Technical Standards (excluding RSS-102), Technical Specifications and Markings is identified**

- i. The CEB sends correspondence to the responsible party<sup>10</sup>, requesting relevant information including, but not limited to the following: test samples/test reports, quality control data, and/or action plan. The correspondence will indicate that the requested information shall be provided to the CEB within 30 calendar days from the date of the correspondence. An acknowledgement of receipt of the correspondence by the responsible party shall be provided to the CEB within 15 calendar days of the date of the correspondence.
- ii. Based on the information received and investigation conducted, the CEB will evaluate and make an assessment of non-compliance. The CEB will seek the advice and opinion from the Directorate of Legal Services of Industry Canada, if required. A report of non-compliance will be generated by the CEB for consideration by DGEPS. This report will include the following:
  - a. where applicable, the names and contact information of the importer, manufacturer, distributor or vendor of the equipment; model number, Industry Canada registration number; and Certificate holder;
  - b. a brief description of the equipment, its parameters of operation and its purpose, and any information that is available on distribution and retail channels;
  - c. evidence and explanation of the offence or breach of terms or conditions of the radio equipment/telecommunications apparatus authorization/certificate including a signed test report from DGEPS;
  - d. description of the information exchange, progress report that took place with the delinquent party such as: copy of notes from telephone calls, letters, etc;
  - e. results of the investigation and justifications;
  - f. the quantity of devices found to be non-compliant, the total number of these devices available in Canada, the length of time that they have been available, an assessment of potential interference and/or risks to users, and any additional known information that will assist in determining required action and in identifying the equipment; and
  - g. recommendations for appropriate enforcement action(s).
- iii. In the case when no acknowledgement is received from the responsible party within 15 calendar days from the issuance of the initial correspondence, direct contact with the responsible party will be made by the CEB and a second correspondence from DGEPS

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<sup>10</sup> Responsible party, as defined in the Definitions section, may include one or more of the following: the certificate holder, manufacturer, testing laboratory, certification body, supplier, distributor, and importer. The CEB will make every effort to contact the Canadian representative of the responsible party.

will be issued to the senior level (e.g. President of the Canadian operation) of the responsible party.

- iv. In the case when no response is received within 30 calendar days from the issuance of the first correspondence, the CEB will generate a report of non-compliance, and will include all information related to the responsible party's failure to provide the requested information. The report of non-compliance will be forwarded to the Director General, Engineering, Planning and Standards Branch for a determination of non-compliance.
- v. The Director General of the Engineering, Planning and Standards Branch will make a determination of non-compliance and will issue a signed request for DGSO to proceed with appropriate action (see IPC-3-24-16). The request will include the summary of the incident and the report of non-compliance generated by the CEB.

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## Appendix B

### **Handling Procedure to be followed by the Certification and Engineering Bureau (CEB) when Non-Compliance with Radio Frequency Exposure Requirements (as per RSS-102) is identified**

- i. The non-compliance identified will be immediately reported to DGEPS and ADM SITT. The Deputy Minister and MINO will be notified when non-compliance has been determined.
- ii. The non-compliance identified will be concurrently referred by DGEPS to the Director, Consumer and Clinical Radiation Protection Bureau, Department of Health, as per the MOU between SITT and the Health Environments and Consumer Safety Branch, Department of Health<sup>11</sup>, both for information and for an expert opinion on the severity of the non-compliance so that appropriate urgency and action can be assigned to resolution of the non-compliance.
- iii. The CEB will seek the advice and opinion from the Directorate of Legal Services of Industry Canada.
- iv. The CEB will promptly establish direct contact with the responsible party<sup>12</sup> (e.g. telephone and email) to obtain relevant information required for CEB's investigation. Concurrently, the CEB will also send a notification letter requesting relevant information including, but not limited to the following: test samples/test reports, quality control data, and/or action plan. A formal response (acknowledgement and preliminary action plan) from the responsible party is required within 5 business days from the initial contact.
- v. However, if Health Canada advises that the initial audit results pose an imminent health hazard, then this becomes priority one for the CEB investigation process. If a CB was the certifier, it will be advised immediately and requested to urgently contact the manufacturer for all relevant information mentioned above. The CEB will immediately acquire samples from the Canadian marketplace and commence compliance testing.
- vi. Based on the information received and investigation conducted, the CEB will evaluate and make an assessment of compliance or non-compliance. If non-compliance, a report of non-compliance will be generated by the CEB for consideration by DGEPS. This report will include the following:

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<sup>11</sup> Memorandum of understanding on respective responsibilities for public exposure to electromagnetic energy produced by radiocommunication devices between the Spectrum, Information Technologies and Telecommunications sector Department of Industry and the Health Environments and Consumer Safety Branch, Department of Health

<sup>12</sup> Responsible party, as defined in the Definitions section, may include one or more of the following: the certificate holder, manufacturer, testing laboratory, certification body, supplier, distributor, and importer. The CEB will make every effort to contact the Canadian representative of the responsible party.

- a. where applicable, the names and contact information of the importer, manufacturer, distributor or vendor of the equipment; model number; Industry Canada registration number; and certificate holder;
  - b. a brief description of the equipment, its parameters of operation and its purpose, and any information that is available on distribution and retail channels;
  - c. evidence and explanation of the offence or breach of terms or conditions of the radio equipment certificate, including a signed test report from DGEPS;
  - d. description of the information exchange, progress report that took place with the delinquent party such as: copy of notes from telephone calls, letters, etc.;
  - e. results of the investigation and justifications;
  - f. the quantity of devices found to be non-compliant, the total number of these devices available in Canada, the length of time that they have been available, an assessment of potential interference and/or risks to users, and any additional known information that will assist in determining required action and in identifying the equipment; and
  - g. recommendations for appropriate enforcement action(s).
- vii. In the case when no formal response is received from the responsible party within 5 business days from the initial contact, a second correspondence will be issued from DGEPS to the senior level (e.g. President of the Canadian operation) of the responsible party.
- viii. In the case when no response is received within 5 business days from the second contact, and every effort has been made to determine if the non-response is due to unique or special circumstances and may therefore be inferred that the responsible party will not cooperate, the CEB will generate a report of non-compliance, and will include all information related to the responsible party's failure to provide the requested information. The report of non-compliance will be forwarded to the Director General, Engineering, Planning and Standards Branch for a determination of non-compliance.
- ix. The Director General of the Engineering, Planning and Standards Branch will make a determination of non-compliance and will issue a signed request for DGSO to proceed with appropriate action (see IPC-3-24-16). The request will include the summary of the incident and the report of non-compliance generated by the CEB.

# Appendix C

## Reference Documents

Industry Canada documents are available on the Spectrum Management and Telecommunications website at:

[http://www.ic.gc.ca/eic/site/smt-gst.nsf/eng/h\\_sf01841.html](http://www.ic.gc.ca/eic/site/smt-gst.nsf/eng/h_sf01841.html)

**RSP 100** - *Radio Equipment Certification Procedure, issue 9, June 2007*

**RSS-102** *Radio Frequency Exposure Compliance of Radiocommunication Apparatus (All Frequency Bands), Issue 2, November 2005*

**IPC-3-24-16** *Enforcement Procedure for Radiocommunication and Telecommunications Equipment Determined not to be in Compliance with Applicable Standards, Draft Revision, June 18, 2009*

**CB-02** *Recognition Criteria, and Administrative and Operational Requirements Applicable to Certification Bodies for the Certification of Radio Apparatus to Industry Canada's Standards and Specifications, issue 4, October 2007*

**DC-01** *Procedure for Declaration of Conformity and Registration of Terminal Equipment Issue 3, May 2009*

### Health Canada Safety Code 6

*Limits of Human Exposure to Radiofrequency Electromagnetic Fields in the Frequency Range from 3 KHz to 300 GHz (Safety Code 6, 1999) is available at:*

<http://www.hc-sc.gc.ca/ewh-semt/pubs/radiation/99ehd-dhm237/preface-preambule-eng.php>

**ISO/IEC Guide 65** *General Requirements for Bodies Operating Product Certification Systems, 1996*

**IEEE Std 1528** *IEEE Recommended Practice for Determining the Peak Spatial-Average Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques, December 19, 2003*