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Information Relating to the Regulation of Radio Apparatus Capable of Receiving Television Broadcasting

Preface

The contents of this bulletin are an expression of Industry Canada's practices, procedures and policies regarding BETS-7— [*Technical Standards and Requirements for Radio Apparatus Capable of Receiving Television Broadcasting*](#). The Department reserves the right to modify its practices, procedures or policies at any time, without notice if, in the opinion of the Department, the circumstances or regulations affecting the management of this aspect of the radio frequency spectrum so warrant. Notice of such changes will be given in advance whenever possible. This bulletin is not intended to replace the regulations themselves, nor is it comprehensive in that it does not answer all possible questions. Therefore, the relevant regulations and amendments thereto should also be consulted for all purposes of complying with the law.

Daniel Duguay
Director General
Engineering, Planning and Standards Branch

Contents

1.	Introduction	1
2.	Purpose	1

1. Introduction

Industry Canada's requirements concerning radio apparatus capable of and intended for receiving television broadcasting are contained in [Radiocommunication Regulations, Part III](#), under Category II equipment, and the standards that apply are defined in the broadcasting equipment technical standard BETS-7—*Technical Standards and Requirements for Radio Apparatus Capable of Receiving Television Broadcasting*.

BETS-7 pertains to three specific types of radio apparatus: digital television receiving apparatus, analog and digital television receiving apparatus, and cable-compatible analog and digital television receiving apparatus. These classifications apply to all radio apparatus capable of receiving television broadcasting, equipped with Advanced Television Systems Committee (ATSC) and/or National Television System Committee (NTSC) tuners, such as television sets, set-top-boxes for digital-to-analog conversion, and other interface devices such as videocassette recorders (VCRs), DVD recorders, digital video recorders (DVRs), intended for sale or resale to the public.

2. Purpose

The purpose of this bulletin is to clarify the application of BETS-7 through the following questions and answers, for the guidance of manufacturers and importers.

1. Q. What are the channel selection requirements for digital TV receivers?

A. Digital TV receivers must be capable of receiving over-the-air ATSC-type signals on all very high frequency and ultra-high frequency channels.

2. Q. What are the channel selection requirements for analog TV receivers?

A. Analog TV receivers must be capable of receiving over-the-air NTSC-type signals on all very high frequency and ultra high frequency channels. Additionally, those receiving apparatus able to connect to a cable TV distribution undertaking using a coaxial cable must be capable of receiving on all very high frequency channels, mid-band channels, super-band channels and ultra high frequency channels. Refer to BETS-7 for further information and definitions.

3. Q. What is considered to be a permanent label or marking?

A. Any label or marking is considered permanent if it cannot be removed without the use of tools.

4. Q. Are there any regulations under the *Radiocommunication Act*, other than the *Radiocommunication Regulations, Part III*, which are applicable to technical requirements for TV receivers?

A. Currently, the only other regulations dealing with technical requirements for TV receivers under the [Radiocommunication Act](#) are contained in Part VI of the [Radiocommunication Regulations](#) and concern interference, including interference-causing equipment.

5. Q. Is there an additional labelling requirement for TV receivers under Part VI of the *Radiocommunication Regulations*?

A. There is no special requirement for a label to indicate compliance under that aspect only, as labelling is associated with meeting all of Industry Canada's BETS-7 requirements.

6. Q. Has the Minister of Industry approved any testing procedure as referred to in the *Radiocommunication Regulations, Part III*?

A. References and guidance are provided throughout BETS-7, where applicable, with respect to TV receivers.

7. Q. Are TVs covered under BETS-7 limited to the reception of TV broadcasting signals?

A. No. BETS-7 only addresses the TV broadcasting receiving capabilities of a TV receiver. Therefore, any additional features, such as sound broadcasting reception capability (e.g. AM, FM, mono or stereo and shortwave reception), or inputs/outputs for connecting auxiliary equipment or apparatus or connecting to a cable TV distribution undertaking, are allowed provided that all requirements of BETS-7 pertaining to television reception are met.

8. Q. Does BETS-7 preclude the sale of AM/FM receivers that are also capable of receiving the audio portion of a TV transmission?

A. No. Multiband radios capable of receiving the audio portion of a TV transmission are not included in the Department's Regulations on radio apparatus capable of receiving television broadcasting.

9. Q. Does BETS-7 permit the use of numerical designators to identify mid-band and super-band channels?

A. Yes. However, given that this matter is not in any particular manner related to spectrum management, it is not covered in BETS-7.

10. Q. What is the effective date of BETS-7?

A. The publication date is the effective date.

The following timetable has been established in order to facilitate the transition concerning testing and labelling requirements for manufacturers and importers given that Issue 2 of BETS-7 has been replaced by Issue 3:

- Any make and model/type number for which the notification to Industry Canada has already occurred or will occur on or before August 31, 2015, as per Section 3 of BETS-7, is considered to be compliant with Industry Canada's requirements, including labelling, as specified in Issue 2. Nevertheless, Industry Canada encourages manufacturers and importers to adopt Issue 3, if possible.

- Any make and model/type number for which the notification to Industry Canada has not occurred on or before August 31, 2015, as per Section 3 of BETS-7, must fulfill Industry Canada's requirements, including labelling, as specified in Issue 3.

11. Q. Does BETS-7 allow the sale of TV receivers without any antennas?

- A. Yes. It is expected though that any requirements be clearly and prominently communicated to potential consumers, so that they are made aware of any additional accessories to be acquired separately.

12. Q. What are the antenna terminal impedance requirements for TV receivers?

- A. For a TV receiver intended to be connected to a cable TV distribution undertaking, the signal input is through a 75-ohm impedance. Owners of antennas with 300 ohm leads only are expected to use a 300-ohm/75 ohm converting unit to connect the 75 ohm coaxial cable to the TV receiver input terminal.

13. Q. What are the tuning requirements for TV receivers?

- A. TV receivers must have the appropriate tuning mechanism to adequately tune and display the channel selected.

14. Q. Does a manufacturer or importer require approval by Industry Canada before offering for sale radio apparatus capable of receiving television broadcasting?

- A. Departmental approval is not required prior to offering for sale radio apparatus that is capable of receiving television broadcasting, as referenced in Section 3 of BETS-7. However, the manufacturer or importer must use one of the following two options for indicating to the Department that it meets BETS-7 requirements:

- (1) forward electronically to the Department, at the email address given in Section 3 of BETS-7, a notification attesting that the equipment meets BETS-7 requirements and giving the make/model number of each type of apparatus tested and keeping available, for a period of five years, the test data obtained as a result of the tests carried out and making it available to the Minister of Industry on demand; or
- (2) send the documents mentioned in (1) above in paper format to the addressee mentioned in Section 3 of BETS-7 with the same requirements as to the test data.

By labelling the device as required in Section 3 of BETS-7, the manufacturer or importer is certifying that the Department's requirements have been met.

- 15. Q. Does BETS-7 apply to video monitors or computers with video monitors, or to TV sets which are designed for cable reception in hospitals or hotels?**
- A. No, BETS-7 does not apply to video monitors, computers with video monitors or to TV receiving equipment intended for a purpose other than sale or resale to the public.
- 16. Q. Does the tuning capability of a TV receiver have to be simultaneously compatible when switched from the cable to the off-air mode?**
- A. No. It is expected that the apparatus may require adjustment of the preset selection controls to change from the cable to the off-air mode or vice versa.
- 17. Q. Are TV sets that are capable of tuning channels below 120 MHz (commonly designated as A1, A2, etc.) permitted to be sold in Canada?**
- A. Yes. However, cable television distribution undertakings in Canada that are authorized to use the bands 108-120 MHz and 328.6-335.4 MHz to carry TV broadcasting signals can do so under very strict conditions because of the shared use of these bands by other radiocommunication systems.
- 18. Q. Is it permissible to add baseband, RGB or other input and output terminals to TV receivers?**
- A. Yes. There is no restriction on the addition of terminals for various other services and the Department encourages such additions.