<u>Labelling of Wireless Devices (EU, Australia/New Zealand, USA, Canada, Japan)</u>

European Union



General - All wireless devices fall within the scope of the R&TTE (1999/5/EC), unless they are used in the maritime environment and fall within the scope of the Marine Equipment Directive 96/98/EC, in which case, other marking requirements apply.

- The "CE" mark indicates that the product complies with all applicable EU directives.
- All products shall be identified by type, batch, and/or serial number and by the name of the manufacturer or person responsible for placing the product on the market

CE mark and "Alert" symbol (R&TTE Directive Annex VII):

- The CE marking must have a height of at least 5 mm except where this is not possible on account of the nature of the apparatus.
- The CE marking must be affixed to the product or to its data plate. Additionally it must be affixed to the packaging, if any, and to the accompanying documents.
- The CE marking must be affixed visibly, legibly and indelibly.
- Where appropriate it must include an element intended to provide information to the user that the apparatus makes use of radio frequency bands where their use is not harmonised throughout the Community (the "Alert" symbol).
- The "Alert" symbol must have the same height as the initials "CE".

Where it is "not possible or warranted on account of the nature of the apparatus" to have the marking affixed to the apparatus or to its data plate (e.g. size), the CE marking may be placed on the packaging, if any, and in the accompanying documents. The "Blue Guide" (Chapter 7.3) gives more information about the circumstances in which this exemption is allowed.

Blue Guide Chapter 7.3 (extract)

"The CE marking shall, as a rule, be affixed to the product or to its data plate. In addition, it can be affixed, for instance, to the packaging or to the accompanying documents. However, it may exceptionally be moved from the product or its data plate if this rule cannot be followed. This would be justified where affixing it to the product was impossible (for example on certain types of explosives), or not possible under reasonable technical or economic conditions, or where the minimum dimensions could not be respected, or it could not be ensured that the CE marking was visibly, legibly and indelibly affixed. In such cases, the CE marking has to be affixed to the packaging, if it exists, and to the accompanying document, where the directive concerned provides for such documents. The CE marking on the product may neither be omitted nor be moved to the packaging or accompanying documents on purely aesthetic grounds."

"Alert" symbol is applicable to "Class 2" equipments:

- Class 1 equipment Frequency band is harmonised throughout the EU (no usage restrictions).
- Class 2 equipment
 - a. the operator requires a licence, or the frequency used is restricted within national boundaries
 - b. "Alert" symbol must be displayed adjacent to the "CE" mark
 - c. Notifications must be issued to countries where the device is to be placed on the market at least 4 weeks in advance of doing so (see Note 1).

NOTE 1: "The dividing line between Class 1 and Class 2 is not the same as the dividing line between notification and no notification. Most of the time Class 2 equipment (Alert sign required) needs to be notified, and Class 1 equipment (no Alert sign) does not need to be notified. However, there are cases where Class 2 equipment (Alert sign required) does not need to be notified. This is the case of equipment which operates in bands whose use is harmonised (e.g. GSM base stations) but is subject to some restrictions (e.g. a GSM licence), and thus must carry the Alert sign."

"CE" mark	Description
CE	 Notified body has not been involved and the equipment uses a harmonised frequency band (i.e. is Class 1) - only the "CE" mark is required. Manufacturer has self-declared compliance under Annex III

"CE" mark + Alert symbol (Class II device)	Description:
CEO	 Notified body has not been involved and the equipment uses a non-harmonised frequency band (i.e. is Class 2) - the "CE" mark and the "Alert" symbol are required. Notifications required (See Note 1) Manufacturer has self-declared compliance under Annex III

"CE" mark + NB number	Description:
CE0168	 This applies for Annex III, IV and V where a Notified Body (in this case BABT) has been involved in the conformity assessment procedure Where one or more Notified Bodies have been involved, the CE marking and the identification number of each of the notified bodies is required. Product uses a harmonised frequency band (i.e. is Class 1) – no "Alert" symbol required.

"CE" mark + NB number + Alert symbol	Description:	
€ 0168①	 This applies for Annex III, IV and V where a Notified Body (in this case BABT) has been involved in the conformity assessment procedure Where one or more Notified Bodies have been involved, the CE marking and the identification number of each of the notified bodies is required. Product uses a non- harmonised frequency band (i.e. is Class 2) – "Alert" symbol required. Notifications required (See Note 1) 	

Author: Michael Lowry (May 2010)

mlowry@tuvps.co.uk

Australia / New Zealand





Reference: http://www.acma.gov.au/WEB/STANDARD/pc=PC 2676

Should my product be labelled?

<u>Suppliers</u> of radiocommunications products to the Australian or New Zealand market, for which mandatory standards apply, must affix a 'compliance label' to their product.

The label comprises of a C-Tick mark and a unique supplier identification. The C-Tick mark is a certification trade mark registered to the ACMA in Australia under the Trade Marks Act 1995 and to RSM in New Zealand under section 47 of the NZ Trade Marks Act. The mark is only to be used in accordance with conditions laid down by the ACMA and RSM.

A company or person wishing to use the C-Tick mark must make a written application to the ACMA or RSM. The application for permission to use regulatory marks (CO1) is available inside the back cover of this booklet. There is no registration fee.

Download:

• C01 - Application for permission to use regulatory marks (40 kb)

Bromides and an electronic version of the C-Tick mark are available for a nominal fee from Standards Australia sales offices or RSM. Compliance marks can also be downloaded from the <u>ACMA website</u> or the <u>RSM website</u>.

Authority to use the C-Tick mark will only be issued to an Australian or New Zealand based supplier.

What are the acceptable methods for supplier identification?

The compliance label must include the identification of the manufacturer, importer or their agent.

The options for this identification in Australia are:

- a business name and address in Australia;
- a business name registered on the national business register;
- a personal name and address in Australia of the place of business;
- an Australian company number (ACN);
- an Australian registered body number (ARBN);
- an Australian business number (ABN);
- an Australian registered trademark; or
- the supplier code number issued by the ACMA (on application).

The options in New Zealand are:

- the registered name and address of the licensee;
- a New Zealand company number of the licensee;
- a New Zealand registered trademark of the licensee;
- a registered Goods and Services Tax (GST) number; or
- the supplier code number issued by the RSM (on application).

Note: If the trademark option is to be used, the supplier must hold a copy of either the Australian or New Zealand trademark registration certificate including a true representation of the trademark with their compliance records.

Below is an example of the label format.

C-Tick with Supplier Code Number



What is the purpose of the label?

The label indicates that the product complies with the applicable standard and establishes a traceable link between a product and the supplier responsible for placing it on the Australian or New Zealand market. The use of the C-Tick cannot be transferred to another party without the prior approval of the ACMA or RSM.

Label Requirements

The Mark: to be used exactly as shown on the ACMA or RSM websites. No variations are permitted

Location: the mark and supplier identification should be a permanent feature placed on the external surface of the product as close as practical to the model identification.

If it's not possible to apply the label to the external surface of the device due to its size or physical nature then the label must be applied to the labelling or outer surface of the device's packaging.

If it is not practical to attach a label to the external surface of the device, due to its size or physical nature, a label may be attached in the following order of priority:

- outer surface of the packaging; or if impractical
- instructions for use; or if impractical
- warranty or guarantee certificate

The supplier must also apply in writing to the ACMA or RSM explaining why the label can not be attached to the surface of the device, advising of the intended alternative method to be used. If the explanation is acceptable, the ACMA or RSM will provide written approval, which must be kept with the compliance records.

Method of Marking: The label shall be durably applied by any suitable means such as printing, painting, moulding, etching or engraving.

Scale: The mark shall be legible and visible to the unaided eye no smaller than 3 millimetres in diameter and the supplier identification characters no less than 1millimetre in height.

Colour: The label may be reproduced in any colour provided that visibility is assured through either contrast with the background colour or marking in relief (for example, moulding or engraving).

The product may be labelled at any point prior to its being supplied to the Australian or New Zealand market. The ACMA and RSM recognise that it will be more cost-effective for many imported products if they are labelled at the time of manufacture rather than to apply the label at the time of marketing and distribution.

The label may also be placed on promotional material associated with the product.

Is there any exemption from the labelling requirement?

Yes, but the importer or supplier must;

- be a member of the Federal Chamber of Automotive Industries; and
- supply a device that:
 - o is either manufactured as part of a motor vehicle or installed in a motor vehicle, or imported as part of a motor vehicle, and
 - o is an integral part of the motor vehicle, and
 - complies with an applicable standard

If the device is medium risk (level 2) or high risk (level 3) device, compliance records must still be maintained.

Any device that does meet these criteria, but is supplied to the Australian market as a stand-alone item is not exempt from the C-Tick labelling requirements.

What if my product needs the A-tick label for telecommunications standards?



In Australia, the A-Tick label is used to show compliance of customer equipment to the ACMA telecommunications regulatory requirements. If your product is subject to both telecommunications and radiocommunications regulatory requirements, the A-Tick mark will denote compliance with the ACMA telecommunications and radiocommunications standards requirements. For example, a Spread spectrum device that connects to a telecommunications network may only need the A-tick label to denote compliance to both telecommunications and radiocommunications regulatory requirements.

In New Zealand, the A-tick is an accepted compliance mark for telecommunications products to which the New Zealand Radiocommunications (EMC Standards) Notice or a harmonised standard listed in Table 1 of the New Zealand Radiocommunications (Radio Standards) Notice applies. The New Zealand EMC Standards and Radio Standards notices are available here. However, the A-tick is not accepted as an indication that the product is suitable for connection to New Zealand's telephone network. New Zealand based suppliers should contact Telecom New Zealand Ltd for information about regulatory obligations applicable to suppliers of telecommunications equipment. Information regarding telecommunications interconnect requirements may be available at www.telepermit.co.nz/.

Author: Michael Lowry (May 2010)

mlowry@tuvps.co.uk

In all cases, the compliance record must contain all the relevant information described under each of the regulatory arrangements.

What is the Regulatory Compliance mark (RCM)?



The Regulatory Compliance Mark (RCM) is a trademark owned by Australian and New Zealand regulators. It is an alternative mark to the C-Tick. Suppliers from Australia and New Zealand who intend to use the RCM should register with <u>Standards Australia</u> in accordance with AS/NZS 4417.1 and complete the application form in AS/NZS 4417.4 to notify the ACMA.

The RCM is not an alternative mark to the A-Tick telecommunications compliance mark.

What happens if a product is already declared by someone else?

If an importer wishes to supply a product identical to one already on the market, this importer must obtain the appropriate documentation to keep with their own compliance records. Each importer is responsible for ensuring that the imported product complies with relevant mandatory standards and must apply their own supplier identification. It is unfair to expect one importer to be responsible for products brought into Australia by another importer.

USA



Labelling of wireless devices for the US market can be found in the Code of Federal Regulations (CFR) Title 47 (Telecommunication) Part 2 (Frequency Allocations and Radio Treaty Matters; General Rules and Regulations) and in Part 15 (Radio Frequency devices)

Pt2.925 – Identification of equipment (extract)

(1) FCC Identifier consisting of the two elements in the exact order specified in §2.926. The FCC Identifier shall be preceded by the term *FCC ID* in capital letters on a single line, and shall be of a type size large enough to be legible without the aid of magnification.

Example: FCC ID XXX123. XXX—Grantee Code 123—Equipment Product Code

Pt15.19 – Labelling requirements

(3) All other devices shall bear the following statement in a conspicuous location on the device:

"This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation."

(5) When the device is so small or for such use that it is not practicable to place the statement specified under paragraph (a) of this section on it, the information required by this paragraph shall be placed in a prominent location in the instruction manual or pamphlet supplied to the user or, alternatively, shall be placed on the container in which the device is marketed. However, the FCC identifier or the unique identifier, as appropriate, must be displayed on the device.

NOTE: (Reference: OET 784748 D01 Labelling Part 15 &18 Guidelines v07)

If the device is unquestionably too small for the FCC ID to be readable (smaller than 4-6 points), the FCC ID may be placed in the user manual. However, it must be determined that the device itself is too small – the label area allocated to the FCC ID may not be reduced because of overcrowded identification of other product and regulatory information.

Pt15.21 - Information to user

The user's manual or instruction manual for an intentional or unintentional radiator shall caution the user that changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. In cases where the manual is provided only in a form other than paper, such as on a computer disk or over the Internet, the information required by this section may be included in the manual in that alternative form, provided the user can reasonably be expected to have the capability to access information in that form.

Labelling of Modules (USA) (CFR47 Pt15.212)

If using a permanently affixed label, the modular transmitter must be labelled with its own FCC identification number, and, if the FCC identification number is not visible when the module is installed inside another device, then the outside of the device into which the module is installed must also display a label referring to the enclosed module. This exterior label can use wording such as the following: "Contains Transmitter Module FCC ID: XYZMODEL1" or "Contains FCC ID: XYZMODEL1." Any similar wording that expresses the same meaning may be used. The Grantee may either provide such a label, an example of which must be included in the application for equipment authorization, or, must provide adequate instructions along with the module which explain this requirement. In the latter case, a copy of these instructions must be included in the application for equipment authorization.

CANADA



Labelling requirements for Canada can be found in RSS-GEN (2007-06) - General Requirements and Information for the Certification of Radiocommunication Equipment

5.2 Equipment Labels

All Category I (Certification required) radio equipment intended for use in Canada shall permanently display on each transmitter, receiver, or inseparable combination thereof, the applicant's name (i.e. manufacturer's name, trade name or brand name), model number and certification number. This information shall be affixed in such a manner as not to be removable except by destruction or defacement. The size of the lettering shall be legible without the aid of magnification but is not required to be larger than 8-point font size. If the device is too small to meet this condition, the information can be included in the user manual upon agreement with Industry Canada. The label for medical implants which are designed to be used within the human body can be placed on the package and user manual.

The certification number is made up of a Company Number (CN) assigned by the Bureau followed by the Unique Product Number (UPN), assigned by the applicant.

The certification number shall appear as follows:

"IC: XXXXXX-YYYYYYYYYY"

Where:

- "XXXXXX-YYYYYYYYYY" is the certification number;
- "XXXXXX" is the Company Number (CN) assigned by Industry Canada, made of at most 6 alphanumeric characters (A-Z, 0-9), including a letter at the end of the CN to distinguish between different company addresses;
- "YYYYYYYYY" is the Unique Product Number (UPN) assigned by the applicant, made of at most 11 alphanumeric characters (A-Z, 0-9); and
- the letters "IC" have no other meaning or purpose than to identify the Industry Canada certification number.

Permitted alphanumerical characters used in the CN and UPN are limited to capital letters (A-Z) and digits (0-9). An example of the new format for a company having a CN of "21A" and wishing to use a UPN of "WILAN3" would thus be: IC: 21A-WILAN3. Each equipment model shall be explicitly identified. The use of characters, such as #, / or -, in the certification number is not allowed. The use of "wild card" characters in the model number (for the purpose of identifying multiple models with one name) is not allowed.

Equipment that has received certification but is not labelled with the applicant's name, model number and the certification number as outlined above is not considered certified.

Category II (no Certification required) equipment shall be labelled in accordance with the requirements of RSS-310.

Information to the user:

7.1.4 Transmitter Antenna

User Manual for Transmitters with Detachable Antennas

The user manual of transmitter devices equipped with detachable antennas shall contain the following information in a conspicuous location:

"This device has been designed to operate with the antennas listed below, and having a maximum gain of [x] dB. Antennas not included in this list or having a gain greater than [x] dB Equipment manufacturers shall provide proper values of x and y to comply with the applicable RSS. Immediately following the above statement, the manufacturer shall provide a list of all antennas acceptable for use with the transmitter."

7.1.5 User Manual

User manuals for licence-exempt LPDs shall contain the following or equivalent statements in a conspicuous position:

"Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device."

If the antenna is detachable (i.e. selectable by the user), see the user manual requirement in Section 7.1.4. The following instructions in the user manual are also required:

"To reduce potential radio interference to other users, the antenna type and its gain should be so chosen that the equivalent isotropically radiated power (e.i.r.p.) is not more than that permitted for successful communication."

The above statements may be placed on the device instead of in the manual.

Other user manual notices may be required and these will be specified in RSS-210 or 310, as applicable. It is the responsibility of the certification applicant to ensure that such notices conform to the intent of the applicable RSS and be put conspicuously in the user manual. are strictly prohibited for use with this device. The required antenna impedance is [y] ohms.

Labelling of Modules (Canada) (RSS-GEN Section 7.1.1(c))

"The host device complies with the certification labelling requirements of each of the modules it contains."

e.g. "Contains IC: XXXXXX-YYYYYYYYY."

"Contains IC: XXXXXX-ZZZZZZZZZZ" (etc. if more than one module integrated)

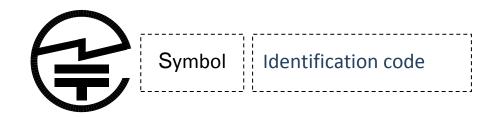
JAPAN



Specified radio equipment certified as complying with the technical regulations by European CABs (Conformity Assessment Bodies) (e.g. BABT) shall bear the Mark in accordance with the MPHPT Ordinance No.146, 2001: Ordinance on the Mark, etc. based on the Law for Implementation of the Mutual Recognition between Japan and the European Community in relation to Conformity Assessment of Specified Equipment.

The Mark shall be accompanied by the symbol and the identification code that are referred to in the Ordinance.

General form of the Mark is as follows:



Example label:



Radio Mark

R- Indicates "Radio" equipment

203 – Indicates the Conformity Assessment Body identification – (203 is BABT)

AZ - Indicates the category of the specified radio equipment (see table below)

JN - Allocated by BABT to indicate "Japan"

123456 - This is an incremental number and will be allocated to you by BABT on application for certification.

Specified radio equipment	Ordnance of MPT No. 37, 1981 (*)	Mark
Citizen radio	Article 2 paragraph 1 item (3)	0
Cordless telephone	Article 2 paragraph 1 item (7)	L
Specified low power radio equipment	Article 2 paragraph 1 item (8)	Υ
Low power security system	Article 2 paragraph 1 item (13)	AZ
Low power data communications system in the 2.4GHz band	Article 2 paragraph 1 item (19)	ww
Low power data communications system in the 2.4GHz band (for radio control model aircraft, 2400-2483.5MHz)	Article 2 paragraph 1 item (19)-2-2	UV
Low power data communications system in the 2.4GHz band (for radio control model aircraft, 2471-2497MHz)	Article 2 paragraph 1 item (19)-2-3	VV
Low power data communications system in the 2.4GHz band	Article 2 paragraph 1 item (19)-2	GZ
Low power data communications system in the 5.2, 5.3GHz band	Article 2 paragraph 1 item (19)-3	XW
Low power data communications system in the 5.6GHz band	Article 2 paragraph 1 item (19)-3-2	YW
Low power data communications system in the 25GHz and 27GHz bands	Article 2 paragraph 1 item (19)-4	НХ
Land mobile station for 5GHz band wireless access system (low power type)	Article 2 paragraph 1 item (19)-11	FV
Digital cordless telephone	Article 2 paragraph 1 item (21)	ΙZ
PHS land mobile station	Article 2 paragraph 1 item (22)	JX
Mobile station for dedicated short range communications system	Article 2 paragraph 1 item (32)	CY
Test station for dedicated short range communications system	Article 2 paragraph 1 item (33)-2	FX
UWB (Ultra Wide Band) radio system	Article 2 paragraph 1 item (47)	UW

Note: "WW" is the code for 2.4GHz WLAN devices and Bluetooth.