

Approvals Down Under



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American Certification Body, Inc

Washington Laboratories, Ltd



Approvals Down Under January 2019

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AGENDA

- **General Requirements for Electrical Equipment**
 - ACMA regulations
 - Labelling
 - Records
- **Electrical Safety Requirements**
- **EMC Labelling Notice**
- **Wireless/Radio Equipment**
 - ACMA Radiocommunications regulation
 - ACMA Short Range Devices
- **Telecommunications Equipment**
 - ACMA Telecommunications Regulations
 - Cellular Modems, PSTN devices
- **RF Human Exposure**
 - ACMA EMF/EMR regulations
 - EMF/EMR & SAR Standards



Australian Government Regulator

- **Australian Communications and Media Authority
ACMA**
 - Telecom, Radio/Wireless, Broadcasting, Internet and other Media
 - Regulates EMC and EMF (RF Exposure: EMR or EME)
 - Does not regulate electrical safety except for Telecom (PSTN)
- **State governments regulate electrical safety**
 - Electrical Regulatory Authorities Council (**ERAC**) consists of all state and New Zealand regulators



Part 1

General Requirements Regulatory Compliance Mark



A simplified process



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RCM

Suppliers must register online using the **Electrical Equipment Safety System (EESS)** national registration database which is administered by ERAC.

This national database is jointly used by the Australian Communication & Media Authority (ACMA), the Electrical Regulatory Authorities Council (ERAC) and Radio Spectrum Management (New Zealand).

ERAC national database:

<https://equipment.erac.gov.au/Registration/>



Electrical Safety Regulators

<http://www.erac.gov.au/index.html>



(Also administer electrical efficiency standards)



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Current ACMA Regulations

ACMA regulates supply of products in Australia

It is illegal to supply a product that does not comply with an applicable standard and has not been labelled in accordance with the applicable labelling Notice(s).

It is illegal to operate non-compliant radio equipment

Equipment regulation is intended to manage risks associated with operation, and connection of end use

Health and safety + emergency call access

Interference to communications

Network integrity

Inter-operability (any-to-any) connectivity of telephone equipment

Regulation does not concern quality or performance



This is managed by consumer law



ACMA RCM Labelling Regulations

- **Radiocommunications Labelling (Electromagnetic Compatibility) Notice 2017: (the EMC Labelling Notice)**

- ACMA Radiocommunications (Electromagnetic Compatibility) Standard 2017: (the EMC Standard- calls up ACMA List of EMC standards)

- **Radiocommunications Devices (Compliance Labelling) Notice 2014, (the Radiocomms Labelling Notice)**

- 16 applicable ACMA mandatory standards

- **Telecommunications Labelling (Customer Equipment and Customer Cabling) Notice 2015 (the Telecoms Labelling Notice (TLN))**

- applicable ACMA standards

- **Radiocommunications (Compliance Labelling — Electromagnetic Radiation) Notice 2014 (EMR Labelling Notice)**

- ACMA Radiocommunications (Electromagnetic Radiation — Human Exposure) Standard 2014 (EMR Standard)



RISKS!

High risk device means a device described as 'Group 2 ISM equipment' in AS/NZS CISPR 11:2004 (2nd Edition).

Level 3 compliance

SAR Testing

Medium risk device means a device that is not a high risk device; nor a low risk device.

Level 2 compliance

most devices are considered medium risk

Low risk device

Level 1 compliance

Battery-operated, low power, non mobile phone



Requirements: Compliance Level 1

Low Risk device

Battery-operated

- cannot operate from external power supply, only from internal batteries

Test report not essential but product must still comply with applicable standard.

Keep a description of the device

Sign a Declaration of Conformity (DoC)

Labelling is voluntary (for EMC only) but compliance records must be kept



Requirements-Compliance Level 2

Medium risk or high risk device

Description of the device; and

Declaration of conformity; and

Test report or a TCF (EMC only); and

- Accredited test report not mandatory for Medium Risk but will be requested by ACMA if compliance is questioned
- Explanatory documentation to prevent users from operating or installing in a way that would make it non-compliant



Requirements: Compliance Level 3

High Risk Devices

CIPSR11 Group 2 ISM equipment

SAR Compliance

the supplier must establish that the device complies with an applicable standard by:
obtaining an accredited test report from an
accredited testing body

Must be labelled



Supplier's Steps to Compliance

1. Identify the applicable labelling notice (category of equipment)
2. Identify the applicable technical standards (specified in the relevant labelling notice) and the testing requirements
3. Demonstrate product compliance, obtain test report and other documents
4. Complete a supplier's Declaration of Conformity (DoC) and maintain compliance records.
5. Register as an ACMA supplier on National database
 - Must be Australian resident or company registered in Australia
 - Can use Local Representative/Agent company that is ACMA registered
6. Label the product with the RCM compliance mark.



Regulatory Compliance Mark (RCM)



RCM replaced C-tick & A-tick 1st March 2016

The RCM is a single compliance mark

RCM is supplier indication that product complies with applicable ACMA and ERAC standards and requirements

A product that is subject to RCM labelling must not be supplied to the market without the RCM label

Also used by suppliers to indicate compliance with mandatory state government electrical safety requirements.



List of subject equipment in AS/NZS 4417.2



Trans-Tasman MRA Australia-New Zealand

Harmonization between Australia and New Zealand commenced 2001

RCM recognized in both countries

Trans-Tasman EMC regulations apply

most products covered by

CISPR/IEC/EN/AS/NZS emissions standards

MRA covers electrical safety

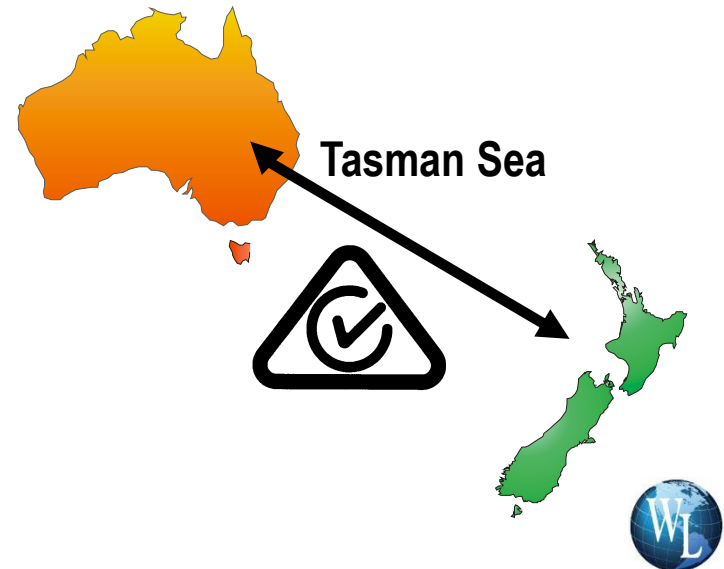
Covers harmonized Wireless standards:
WiFi, BlueTooth, Portable transceivers

Does not include Telecoms and Radiocomms



MINISTRY OF BUSINESS,
INNOVATION & EMPLOYMENT
HĪKINA WHAKATUTUKI

RADIO SPECTRUM
MANAGEMENT



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Responsibilities

Agent/Local Representative of manufacturer or importer means a person who is authorised by the manufacturer or importer to act **in Australia** as an agent of the manufacturer or importer

Agent/Local Rep permitted for ACMA compliance

Agent/Local Rep **not permitted by ERAC for electrical safety registration**

- Agent/Local Rep arrangements not permitted by ERAC for battery charger or Power Adapter registration
- Separate agreement is required by ERAC
- Importer may nominate a consultant as their **Authorized Representative** for ERAC compliance.
 - Done online by the Importer on the ERAC website

Supplier in Australia must establish ACMA compliance by:

a test report to the applicable standard; or

a Technical Construction File (TCF) for EMC only

Accredited (NATA/ILAC) test report not mandatory for EMC but will be requested if compliance is questioned

Accredited (NATA/ILAC) report is accepted as proof of compliance

Accredited (NATA/ILAC) report required for

- some Wireless equipment



Accreditation No. 5292

- SAR testing

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- CISPR 11, Group 2 ISM devices



ACMA Arrangements

Suppliers (in Australia) must register on the **ERAC EESS** national database under the **ACMA** Portal

details to be updated annually as per ERAC arrangements

no registration fees for **ACMA** registration purposes ie. when product not subject to electrical safety registration.

A product that is not required to be labelled for ACMA purposes (i.e., low risk, Level 1 EMC product) is not required to meet ACMA labelling and record keeping requirements

May be done voluntarily

As of March 1st 2016, ACMA Supplier Code Number for C-tick and A-tick no longer permitted



Compliance Records

ACMA compliance record

- a. must be in English;
- b. may be kept in electronic form;
- c. must contain a description of a device;
- d. must contain a test report of testing to each applicable standard
- e. must contain a Declaration of Conformity (DoC)
- f. the Authorised Agent (Local Rep) of manufacturer or importer, must also keep a copy of its Local Rep/Agency Agreement.



DoC

Supplier's declaration of conformity



As required by the following Notices:

- > *Radiocommunications (Compliance Labelling - Devices) Notice 2014* made under section 182 of the *Radiocommunications Act 1992*;
- > *Radiocommunications Labelling (Electromagnetic Compatibility) Notice 2008* made under section 182 of the *Radiocommunications Act 1992*
- > *Radiocommunications (Compliance Labelling – Electromagnetic Radiation) Notice 2014* made under section 182 of the *Radiocommunications Act 1992* and
- > *Telecommunications (Labelling Notice for Customer Equipment and Customer Cabling) Instrument 2015* made under section 407 of the *Telecommunications Act 1997*.

Instructions for completion

- > **Do not return this form to the ACMA.** This completed form must be retained by the supplier as part of the documentation required for the compliance records and must be made available for inspection by the ACMA when requested.

Supplier's details (manufacturer, importer or authorised agent)

Company Name (OR INDIVIDUAL)

TRADING AS

ACMA supplier code number

(issued by the ACMA prior to 1 March 2013)

--

OR

ACN/ARBN

--

Street Address (AUSTRALIAN)

POSTCODE
Phone:

Product details and date of manufacture

Product description – brand name, type, current model, lot, batch or serial number (if available), software/firmware version (if applicable)

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RCM Label

Denotes compliance with mandatory **ERAC** Safety and **ACMA** standards

Based on mandatory standards

- AS/NZS, IEC, EN, CISPR
- ACMA EMR standard
- ACMA Radcoms standards
- ACMA Telecommunications Labelling Notice
- Mandatory Electrical Safety standards



For declared devices, denotes compliance with ERAC safety standard and that it is ERAC Registered.

No immunity requirements except in other jurisdictions- medical, aviation, automotive etc.



Protected symbol, must be registered as ACMA or ERAC supplier to use it



Who Applies RCM Label?

If manufactured outside Australia, the RCM mark must be applied by;

- (a)** the importer; or
- (b)** an agent of the importer; or
- (c)** a person who is authorised by the importer or agent to apply the RCM mark on behalf of the importer or agent.

- May be the overseas manufacturer

Legal liability still rests with importer or supplier in Australia



Who Signs DoC?

Local supplier/importer

Manufacturer in Australia

Manufacturer overseas. (Liability still rests with importer/local supplier)

Agent/Local Rep of overseas or local importer or manufacturer

For ERAC, the Importer or the Importer's consultant, must be registered as the **Authorized Representative** on ERAC database.



Changes to Applicable ACMA Standard

No retesting is required

If a device was compliant and labelled before the standard was amended or replaced;

If a new standard becomes applicable on or after the date of manufacture or importation into Australia

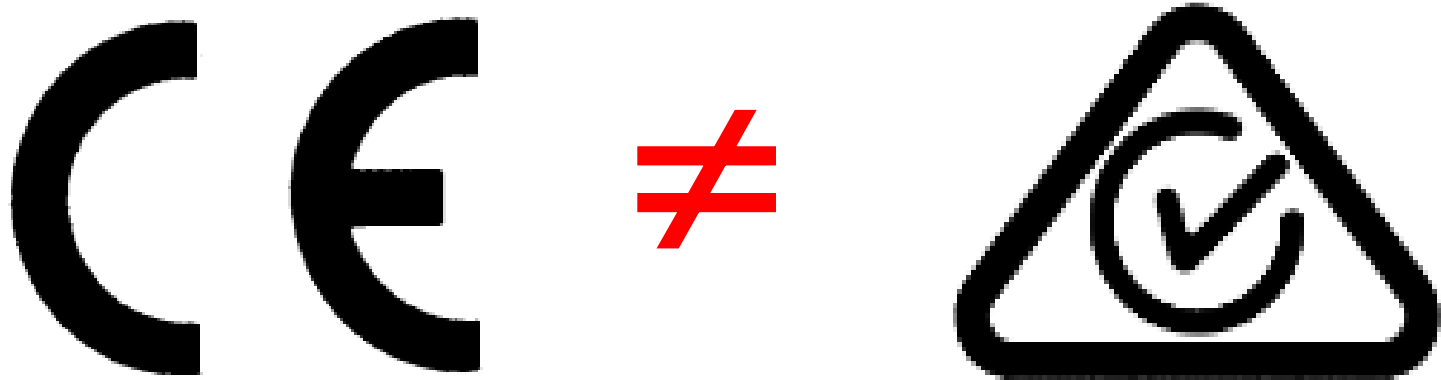
Same standard for the market life of the product

Different from CE Marking approach

Retest to new standard required if product is modified



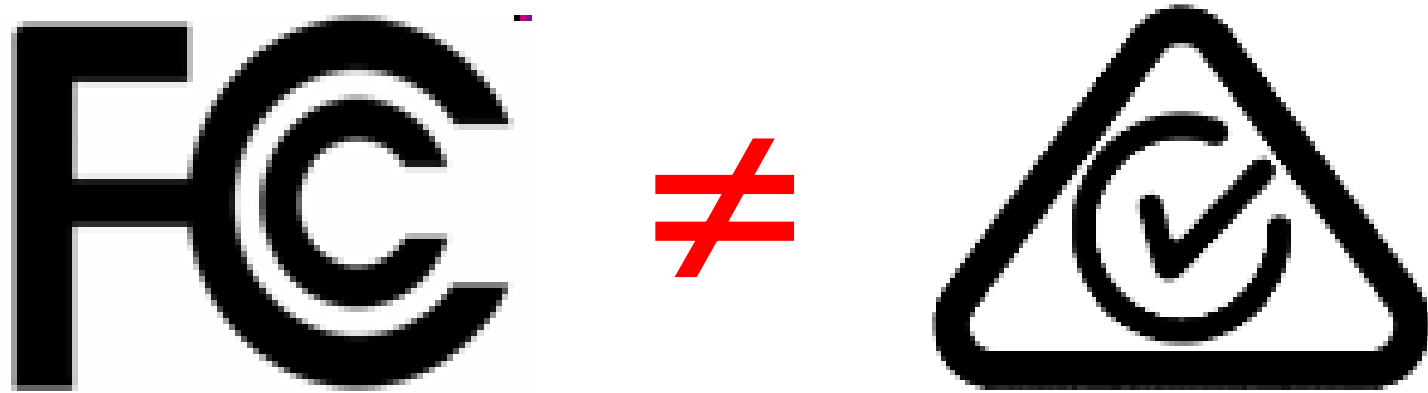
Is CE Mark acceptable?



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Is FCC Label acceptable?



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Is VCCI acceptable?



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Enforcement

Compliance audit triggered by;

Random selection from database

Receipt of written complaint

Products identified at retail outlets or advertising material

Interference to communications and broadcast services eg., LED Lighting

Safety incident, electrocution, hazardous item

Competitor testing and checking

Compliance Records must be available within 10 days of written request by ACMA

ERAC has investigative powers



Request for Accredited Test Reports

If ACMA officer believes compliance records to be inadequate, ACMA may request supplier to:

- (a) obtain 3 or more samples of the device and have the samples tested, in Australia, by an accredited testing body **at the supplier's expense**; and
- (b) provide to ACMA certified true copies of the accredited test report for each sample showing that the device complies with the applicable standard

Device is considered to comply:

- (a) if 3 or 4 samples were tested — all samples must be compliant according to the accredited test reports .
- (b) if more than 4 samples were tested — at least 80% of the samples tested must be compliant according to the test reports.



Penalties

Prohibition of supply

Seizure and forfeiture of stock or compulsory recall

On the spot fines

Prosecution

Embarrassment & bad publicity

Imprisonment (extreme embarrassment!!)



Examples of Penalties - ACMA

Supply of Non-standard equipment

Individual : \$13,000

Corporate : \$160,000

False Statement:

Individual: \$11,000

Corporate: \$ 55,000

Sale without label, label without compliance

Individual: \$11,000

Corporate: \$55,000

Knowingly causing interference

12 months jail + fines



Penalties – CONSUMER LAW

A supplier who fails to comply with a ban may be found guilty of a criminal offence.

The maximum fine is **\$220,000** for an individual or \$1.1 million for a corporation;

AU\$ = 78¥ = 0.6EUR = 0.71USD = 4.8CNY

Civil penalties for the same amounts also apply.



Part 2

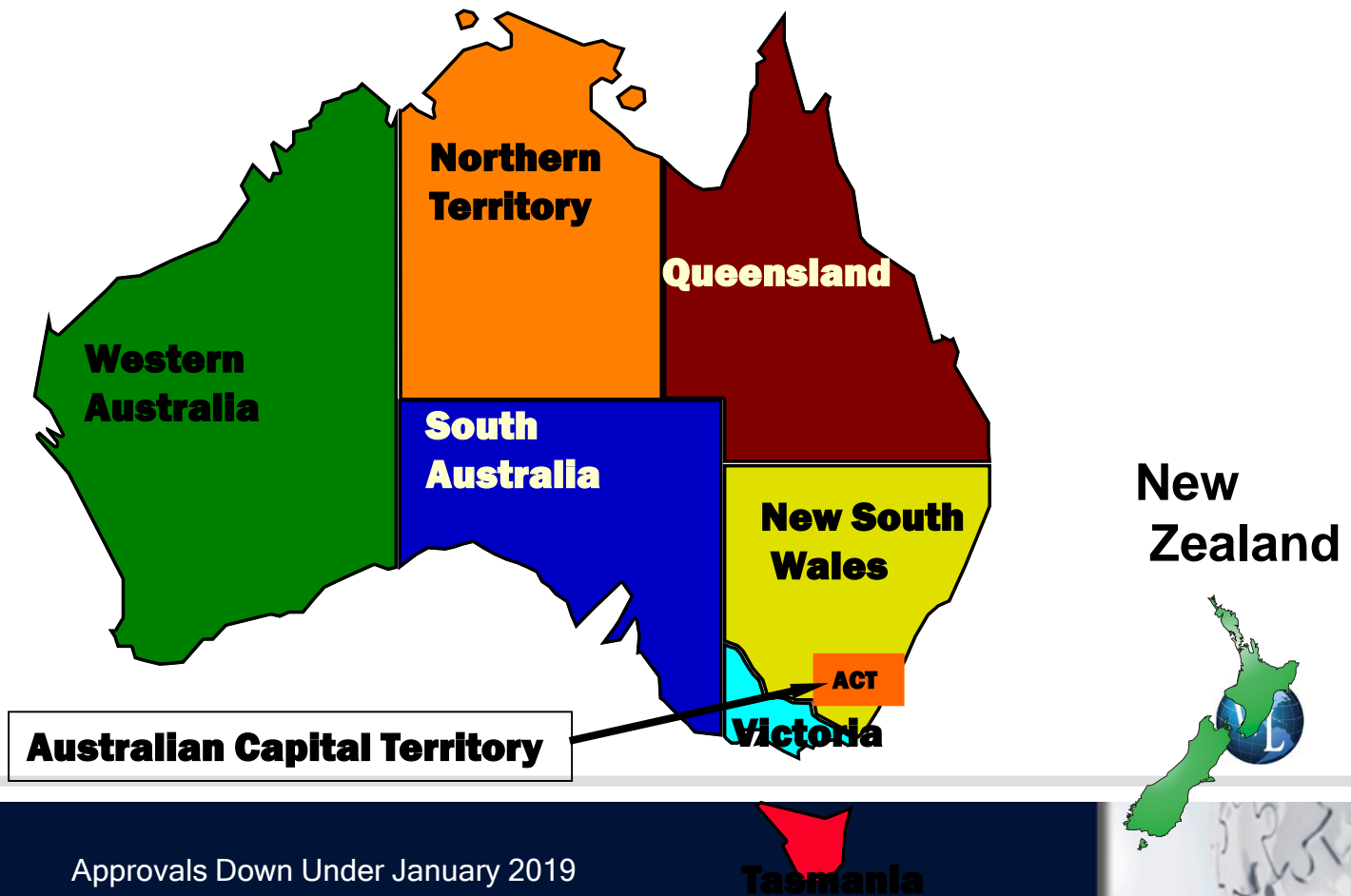
Safety Regulations Australia & New Zealand



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Safety Regulators

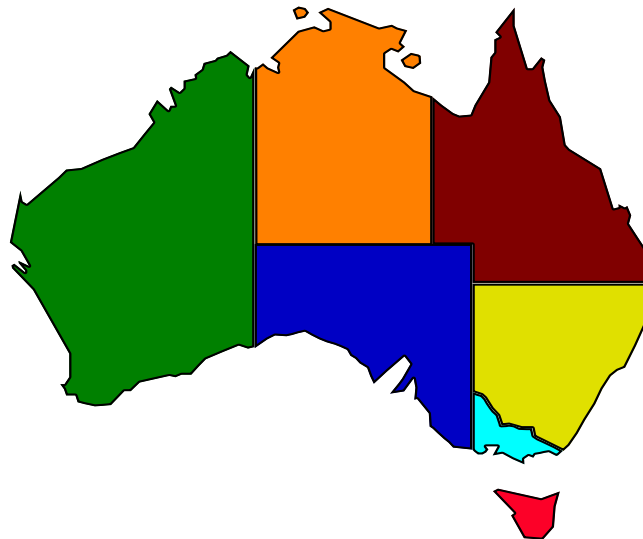
6 State, 2 Territories & New Zealand



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Electrical Safety Regulators

<http://www.erac.gov.au/index.html>



Electrical Regulatory Authorities Council (ERAC)



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Mandatory Electrical Safety Scope

- “Prescribed Items” a.k.a. “Declared Articles”

Items/Articles listed in AS/NZS 4417.2

Mandatory accredited testing and report

Testing must be performed by **NATA (or ILAC)** accredited test laboratory; **A2LA, JAB, DAkkS (DKD), +**

Must be certified by accredited JAS-ANZ certification Body who issues a “Certificate Of Conformity”

- a sample may be requested
- application fees are charged

Product details and certificates must be registered on ERAC Data Base, fees apply

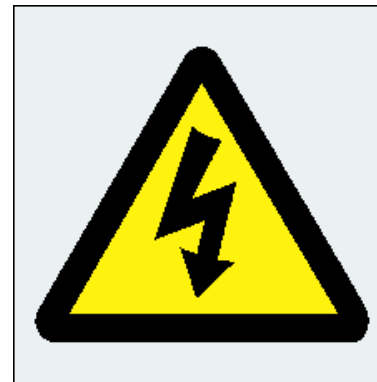
IECEE (CB) reports acceptable with Australian differences



List of Prescribed/Declared Items

Listed in AS/NZS 4417.2

Consumer devices
Domestic appliances
TV Receivers
Battery Chargers
Transformers
Power Adapters
Electronic ballasts
etc.



For a current list, go to:

[http://www.fairtrading.nsw.gov.au/biz_res/ftweb/pdfs/Businesses/Explanatory notes and declaring order.pdf](http://www.fairtrading.nsw.gov.au/biz_res/ftweb/pdfs/Businesses/Explanatory_notes_and_declaring_order.pdf)



Electrical Safety - Equipment

”Non-Prescribed Items”

- all other items of electrical equipment that are not listed as Declared/Prescribed articles
 - Commercial, industrial, scientific, wireless, ITE etc
- Accredited testing not mandatory
- Certification and ERAC registration is voluntary
- Consumer, competition and OH&S laws require safety compliance.
- Must still meet minimum safety standard. **AS/NZS 3820**
- Australian “difference testing” is common
- Must also meet ACMA requirements before RCM is applied



Safety Compliance - Labelling Requirements

Prescribed Items:

Supplier must be registered with **ACMA and ERAC** as the Responsible Supplier

RCM label after Item is registered on ERAC Data base.

Non-prescribed Item:

Suppliers must be registered with ACMA as the Responsible Supplier

not necessary to register with ERAC

ERAC out of scope but ACMA in scope: 



Safety Compliance - Labelling Requirements

RCM Label

Minimum of 3mm height, durable; not easily removed;
Placed on an external surface or one easily accessible to the user.



Part 3

EMC Regulations Australia & New Zealand



Approvals Down Under January 2019

The ACMA EMC Labelling Notice

The ACMA Radiocommunications Labelling (Electromagnetic Compatibility) Notice 2017 **(the EMC Labelling Notice)**

Specifies equipment supplier's obligations for:

- Testing to ACMA applicable standard
- Keeping compliance records
- Labelling



ACMA List of Applicable EMC Standards

- Includes most standards that are on the EU OJ list of CE Marking EMC standards
 - Emission aspects of EN standards, immunity not required

<http://www.acma.gov.au/Industry/Suppliers/Regulatory-arrangements/EMC-Electromagnetic-compatibility/emc-standards-list>

- Includes AS/NZS CISPR 11, 12, 13, 14-1, 15, 22, 32
- EN Versions also included
- CISPR 22/EN55022 replaced by CISPR32/EN55032
- CISPR 25 not mandatory
 - Automotive aftermarket devices generally tested to CISPR 32



Exemptions - EMC Compliance only

Other jurisdictions (medical, automotive etc)

Prototypes

Military/defence/approved foreign defence equipment

Device where power consumption $< 1 \text{ mW}$

Battery operated devices (Note definition)

Research/educational; study of EMC

Spare part: Identical specifications and RF emissions

Component

A device not for end use intended for direct supply to manufacturer

Exhibition/demonstration

Fixed installation

But note that the Radiocommunications Act prohibits interference to communications.

Power supply $> 600 \text{ VAC}$ or $> 1000 \text{ VDC}$

Vehicles, tractors and machinery approved under industry voluntary codes

Must comply with NB and BB standards per voluntary codes of practice

Various law enforcement agencies.



Personal computers assembled in Australia from individually compliant component

Components must each be labelled with RCM



Part 4

Radiocommunications



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Radio-Wireless Transmitters

Radiocommunications Devices (Compliance Labelling) Notice 2014 (the Radiocomm Labelling Notice)

<https://www.legislation.gov.au/Series/F2014L01236>

- Applies to all wireless devices except cellular and broadcasting
- Has 15 applicable ACMA mandatory standards for different types of transmitters
 - ACMA standards generally similar to ETSI/EN standards
 - Frequency/spectrum plan may sometimes differ
 - No licence required, no submittal to ACMA, no ACMA fees
 - DoC , compliance records and RCM label required
- Contains 8 Australia-New Zealand harmonised standards
 - RCM valid in AU and NZ where standards are harmonised



ACMA Mandatory Radiocomm Standards

<http://acma.gov.au/Industry/Suppliers/Regulatory-arrangements/Radiocommunications-devices/radiocommunications-standards-list>

Calls up 15 Applicable standards including

- Short Range Devices (WiFi, BT, etc)
- PTT transceivers
- Mobile transceivers
- Marine transceivers
- Emergency beacons
- DECT
- etc.



Radiocomms Compliance

Low, Medium and High Risk categories

Same requirements as for EMC Labelling Notice

Level 1: Description & DoC

- Test report not mandatory but must comply
- Labelling mandatory

Level 2: Description, DoC & “evidence” of compliance

- May be a test report, unaccredited acceptable
- FCC or ETSI reports acceptable if Australian requirements met

Level 3: Description, DoC & accredited report

- Accredited FCC/ETSI report to Australian requirements is acceptable
- SAR Reports are always Level 3 and must be accredited



Short Range Devices



Australian Government
**Australian Communications
and Media Authority**



Wireless Networking



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Short Range Devices (1)

Short range devices operate under **class licence** conditions listed in:

“Radiocommunications (Low Interference Potential Devices) Class Licence 2015 <https://www.legislation.gov.au/Series/F2015L01438>

- prescribes standards, and may specify other technical and operational parameters.
- **No applications, no certifications, no registrations or ACMA fees**

802.11a/b/g/n & BlueTooth must comply with ***“ACMA Radiocommunications (Short Range Devices) Standard 2014”***

Must not cause interference and is not afforded protection from interference

Radiocommunications (Electromagnetic Radiation- Human Exposure) Standard 2014 (applies to all RF transmitters)



SAR or AS/NZS 2772.2



Short Range Devices (2)

To operate under the class licence the device must comply with AS/NZS 4268

The following standards in part or in full:

AS/NZS 4268

ETSI/EN 300 220-1

ETSI/EN 300 328

ETIS/EN 300 330

ETSI/EN 300 440

ETSI/EN 301 893 (5600-5650 MHz prohibited)

ETSI/EN 302 288-1



Wireless Networking



FCC part 15.247 reports

Gap testing may be required to meet AS/NZS 4268





Radiocommunications (Low Interference Potential Devices) Class Licence 2015

Item	Class of transmitter	Permitted operating frequency band (MHz)	Maximum EIRP	Limitations
52	Frequency hopping transmitters	915-928	1 W	A minimum of 20 hopping frequencies must be used
53	Frequency hopping transmitters	2400-2483.5	500 mW	A minimum of 15 hopping frequencies must be used
54	Frequency hopping transmitters	5725-5850	4 W	A minimum of 75 hopping frequencies must be used



Radiocommunications (Low Interference Potential Devices) Class Licence 2015

Example

Item	Class of transmitter	Permitted operating frequency band (MHz)	Maximum EIRP	Limitations
44	Radio Local Area Network transmitters used indoors (RLAN)	5150-5250	200 mW (averaged over the entire transmission burst)	<ol style="list-style-type: none"> 1. If the emission bandwidth is 1 MHz or greater, the radiated power spectral density in any 1 MHz is limited to 10 mW per MHz 2. If the emission bandwidth is less than 1 MHz, the radiated power spectral density in any 4 kHz is limited to 40 µW per 4 kHz
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Radiocommunications (Low Interference Potential Devices) Class License 2015

Example

Item	Class of transmitter	Permitted operating frequency band (MHz)	Maximum EIRP	Limitations
44A	RALN transmitters used indoors	5250-5350	200 mW (averaged over the entire transmission burst)	<ol style="list-style-type: none"> 1. If the emission bandwidth is 1 MHz or greater, the spectral density in any 1 MHz is limited to 10 mW EIRP per MHz 2. If the emission bandwidth is less than 1 MHz, the spectral density in any 4 kHz is limited to 40µW EIRP per 4 kHz 3. From 1 January 2006 devices operated for the first time must use Dynamic Frequency Selection (DFS) and Transmit Power Control (TPC). If TPC is not used then the maximum EIRP is limited to 100mW

5600 -5650 MHz range not permitted in Australia



Radiocommunications (Low Interference Potential Devices) Class License 2015

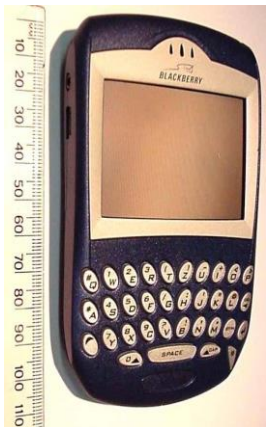
Example

Item	Class of transmitter	Permitted operating frequency band (MHz)	Maximum EIRP	Limitations
45	Digital modulation transmitters	915-928	1 W	<ol style="list-style-type: none">1. The radiated peak power spectral density in any 3 kHz is limited to 25 mW per 3 kHz2. The minimum 6 dB bandwidth must be at least 500 kHz
902-915 MHz range not permitted in Australia				



Part 5

Telecommunications Approval Requirements for Australia



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Telecommunications (Labelling Notice for Customer Equipment and Customer Cabling) Instrument 2015

<https://www.legislation.gov.au/Series/F2015L00190>



Known as the Telecoms Labelling Notice (TLN)

Includes :

Security Systems/modems/GPS Trackers with PSTN, GSM, GPRS, 3G, 4G or other telecommunications interfaces

Mobile Phones

Cordless Phones

PSTN Telephones

VOIP devices

Also

- Fax Machines, Modems (including ADSL Modems)
- PABX's, System Integral Phones
- Some Transmission Equipment



2G/3G/4G Cellular Devices

- **AS/CA S042.1:2015 – General** [AS/CA S042.1:2015](#)
 - Requirements for connection to air interface
 - Also applies to Satellite comms devices
- **AS/ACIF S042.3:2005 (2G, GPRS)**
 - Requirements for GSM Equipment
http://www.commsalliance.com.au/data/assets/pdf_file/0011/2432/S042-3_2005r.pdf
- **AS/CA S042.4:2015 (3G & 4G)** [AS/CA S042.4:2015](#)
 - Requirements for IWBCDMA and LTE Equipment



- Certification Body Statement (Certificate) is optional
 - based on documentation review

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AS/CA S042.4:2015 (3G & 4G)

ETSI EN 301 908-1 V6.2.1 (2013-04) Electromagnetic compatibility and Radio spectrum Matters (ERM); Base Stations (BS), Repeaters and User Equipment (**UE**) for IMT2000 Third-Generation cellular networks; Part 1: Harmonized EN for IMT-2000, introduction and **common requirements**, covering essential requirements of article 3.2 of R&TTE Directive

Final integrated product must comply.

Module manufacturer's report increases confidence but not acceptable on its own.



AS/CA S042.4:2015 (4G)

ETSI EN 301 908-13 V6.2.1 (2013-10) Electromagnetic compatibility and Radio spectrum Matters (ERM); Base Stations (BS), Repeaters and User Equipment (**UE**) for IMT2000 Third-Generation cellular networks; Part 13: Harmonized EN for IMT-2000, Evolved Universal Terrestrial Radio Access (**E-UTRA**) (UE) covering the essential requirements of article 3.2 of the R&TTE Directive



Usually handled by the Module Manufacturer



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Other Requirements

EMC

Charger, Accessories, Car Kits

Human Exposure to RF

EMR, SAR

Body Worn SAR applicable for Hands Free Kit

Safety

Power adapters/Chargers, Handset



[List of Requirements-RCM1.doc](#)



Part 6

EMR-EMF-SAR Testing & Approval Requirements for Australia



Wireless Networking



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EMR/EMF Regulations

The Radiocommunications (Compliance Labelling- Electromagnetic Radiation) Notice 2014

[Radiocommunications \(Compliance Labelling- Electromagnetic Radiation\) Notice 2014](#)

Known as the EMR Labeling Notice

Same requirements as for EMC

Register as ACMA supplier to use RCM

Record keeping, supporting documentation

Testing and report requirements

Laboratory accreditation

Compliance levels

Labelling requirements

Declaration of Conformity (DoC)



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EMR/EMF Regulations

The Radiocommunications (Electromagnetic Radiation - Human Exposure) Standard 2014

[Radiocommunications \(Electromagnetic Radiation — Human Exposure\) Standard 2014](#)

Known as the ACMA EMR Standard

“Standard” sets limits for human exposure to EMR from mobile/portable Radiocommunications Transmitters that have an integral antenna

Created by Australian Communications and Media Authority (ACMA)

Specifies ARPANSA (ICNIRP) Limits <http://www.arpansa.gov.au/pubs/rps/rps3.pdf>

2 measurement methods (Field meter or SAR method)

Allows assessment by computation (FCC MPE)



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ACMA EMR Standard 2014

Assessment Methods – Depends on Transmitted Power

User Position	Applicable Frequency Range	ACMA Evaluation Method
> 20 cm from Human Body	300 kHz to 100 GHz	Power density or Field Strength Reference Level measurements - EMR Meter AS/NZS2772.2
< 20 cm from Human Body	150 MHz – 5800 MHz	SAR measurements Push-to-Talk/BodyWorn devices - SAR per EN62209-2
Close Proximity to Human Ear	300 MHz – 3000 MHz	SAR Measurements at the ear Mobile/Portable Phones - - SAR per EN62209-1
< 2.5 cm from Human Body	300 kHz-100 GHz	If less than 20 mW, - complies, testing not required



EMR/SAR Measurement Methods

ACMA EMR Standard 2014

Ear position - SAR

EN62209-1

FCC Reports not acceptable

Body Worn Position – SAR

EN62209-2

FCC Reports not acceptable

Devices >20cm from body

EMR field strength meter,
power density, reference levels

AS/NZS 2772.2:2016

- Computation method allowed
- Direct measurement



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EMR Labelling-Compliance Records

The Radiocommunications (Compliance Labelling-Electromagnetic Radiation) Notice 2014

Labelling requirements same as for RCM

Register as ACMA supplier on ERAC database

Prepare SAR test report (+other test reports)

- SAR Test Lab must be NATA/ILAC accredited for SAR testing
- FCC SAR Report not acceptable

Prepare Description of device

Prepare Compliance Folder

Declaration of Conformity

Apply RCM

No need to report actual SAR in user information.



REQUIREMENTS FOR WLAN/RADIO TRANSMITTERS

Adding a WiFi module complicates approvals

A “pre-approved” module **greatly** simplifies testing and certification

CE marking (RED) has self DoC process but testing is more onerous: (immunity receiver tests)

FCC has less testing but onerous certification required.

Testing must be from lab that has the specific FCC scope of accreditation

ACMA only requires applicable EMC and EMR standards



QUESTIONS



Approvals Down Under January 2019



Thank you!

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Approvals Down Under January 2019

