

## INTRODUCTION:

**Under current Australian Federal Consumer Laws, all retailers are legally responsible for the safety of the products they sell, and the company can be prosecuted for negligence if it is found that a defect of their product has caused personal injury or damage.**

**There are a few points that are commonly (often conveniently) misunderstood:**

**1.** Under Australian Consumer law, the person or organization *who supplies the product to the end user* is deemed to be the manufacturer, and is required to make good any and all loss suffered by the end user, as a result of a demonstrable and reasonably foreseeable deficiency of the product sold.

It used to commonly stated that: "Whoever takes the money from the consumer" was deemed to be the manufacturer, but now "supplying" has been expanded to include "leaving the item lying around where a person might find it and use it!"

(That's why it's normal practice to cut AC power leads from scrapped appliances before throwing them in the rubbish, because if the user then fits their own Power plug, it's not what the company "supplied.")

**2.** Under Australian Federal Consumer law, there is *no such thing* as a "XX Month Warranty." That is, stating "12 Months Warranty" does not magically absolve you or your company from all warranty obligations at the stroke of Midnight 365 days from the date of sale. Warranties are now based on what is accepted to be a reasonable lifespan for the particular product. So, 12 months might be reasonable for a pair of socks, but modern TVs typically last for over 10 years. Generally, up to three years after the date of purchase, it should

cost no more than about 30% of the original purchase price to repair a product, otherwise the product must be replaced. There is recognition of the length of time the purchaser has been able to use the product, and there is no hard and fast rule. *Under no circumstances* can a consumer's warranty be conditional on the retailer's own supplier honoring *their* warranty. The consumer's warranty and the retailer's warranty from their wholesaler *are two entirely separate matters*. The onus is on the retailer to seek out reliable suppliers; under Australian Consumer Law, it's basically your tough luck if you haven't done your homework!

**3.** One of the statutory rights guaranteed under the Commonwealth legislation is that a purchaser has the absolute right to return faulty or unacceptable goods to the point of sale for replacement or refund. Statements such as: "Do not return to store, phone this [this number]" or "Take the product to [supplier or service agent]" are now illegal. It's OK to *suggest* that you might get quicker results by going direct to the nominated place, but there must always be the option to return it to the store where it was purchased.

**4. Warranty Statements.** There is no need for a product to carry any warranty statement *at all*, but if you wish to include one, it must be compliant with Australian Consumer Law. You are free to offer warranties that go beyond the statutory minimum, but you are *absolutely prohibited* from attempting to reduce customers' statutory rights.

("Statutory" meaning: "According to statute; that is, written government law.")

Warranty registration cards that can be filled out and mailed to the supplier can be included with the product, but they are legally meaningless. Filling out such a card cannot be a condition of warranty, and suggesting otherwise can *and has* led to prosecutions!

## Types of Compliance for Electrical Appliances

There are actually *four completely separate* areas of compliance, run by four completely separate government departments. Not all of them apply to all products; they are (in order of importance to us):

- **Electrical Safety** - mostly mains operated items.
- **Electromagnetic Compatibility (EMC)** – all items that can potentially generate electrical interference.
- **Energy Efficiency (MEPS or GEMS)** relating to how much energy mains powered items can waste as heat. (For us, mostly AC adaptors).
- **Water efficiency (WELS)** Mostly applies to products like washing machines and dishwashers.

### Electrical Safety

This is far and away the most important area of compliance to us, since we sell hundreds of mains-operated items. Although there are theoretical penalties for EMC and MEPS infringements, the worst they can do is issue an infringement notice. Electrocutions or fires are far more serious matters!

### Electrical Safety reports

(Also known as: “SAA” reports, “CB” Reports and “LVD” Reports).

For any potentially dangerous product a retailer sells, they need some sort of proof that it meets the relevant Australian Safety Standard(s). Standards themselves are generally long and somewhat rambling documents issued by Standards Australia. They’re more or less a “professional opinion” of what tests a product should pass to be regarded as safe to sell and use in Australia. Note that standards are *not legal documents in themselves*, it’s only when governments legislate that products *must meet a particular standard*, that they have the force of law.

Standards documents can be purchased from Standards Australia’s marketing division SAI Global, and they are not cheap!

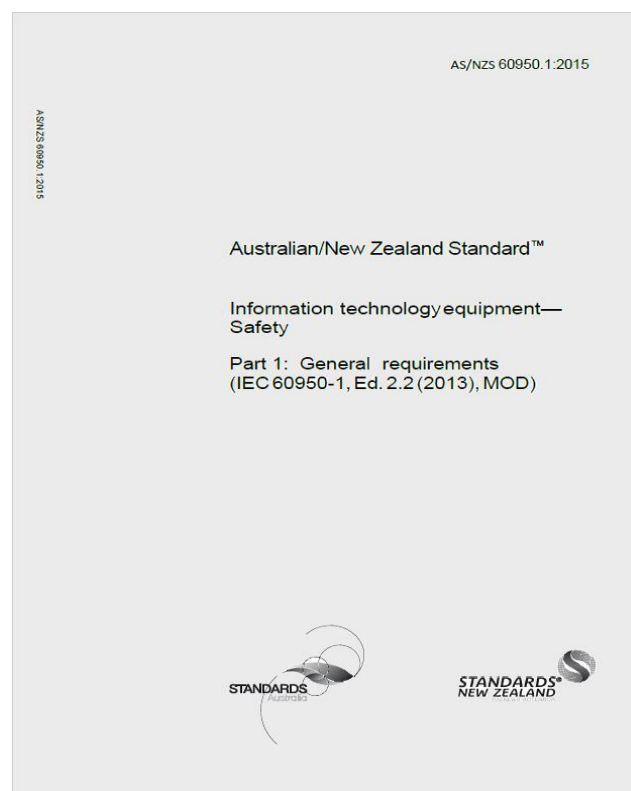
To the right is example of the cover sheet of a typical Australian Safety Standard, in this case AS/NZS60950, which covers IT and telephone equipment (Note: AS/NZS 60950 has now been superseded by AS/NZS 62368).

### Page 2

Australia  
[www.jaycar.com.au](http://www.jaycar.com.au)  
 techstore@jaycar.com.au  
 1800 022 888

Notice how it mentions “IEC 60950” etc. That’s because most AS/NZS standards are based on European standards, with variations to reflect the differences between the electrical systems, climate etc. So AS/NZS 60950 is essentially the Australian version of IEC 60950.

Notice also the suffixes after 60950, which indicate the year it was last updated, the particular section covered by that particular document and so on.



Standards are generally made up of dozens or hundreds of “Clauses,” similar to this one:

#### 11.2.3: Parts, other than windings and BOARDS, providing electrical insulation.

The temperature rise of insulating parts other than windings and BOARDS, the failure of which would cause an infringement of the requirements of 11.1, 11.2.2 and 11.2.4, shall not exceed the values given in Table 3, item b) "Fault conditions".

Copyright ©  
 2022 Jaycar



New Zealand  
[www.jaycar.co.nz](http://www.jaycar.co.nz)  
 techstore@jaycar.co.nz  
 800 452 922

There is a separate clause like that for every test, measurement or inspection the standard requires. You are endlessly directed to tables, annexes, and quite often, other standards, so they require considerable expertise to interpret.

When a product is submitted to a Test Lab to generate a Safety Report, the lab is required to go through all those clauses one by one, and note down all their findings on a special Test Report form (TRF). This can be variously marked with “N/A”, “P”(ass) , “F”(ail) or, if required, some actual measurement. Here is an excerpt from an actual test report:

|        |                                                                                                    |                                                                       |   |
|--------|----------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------|---|
| 11.2.2 | Measurement of temperature rises                                                                   | (see appended table 11.2 of CB reports 17038530 001 and 17038530 002) | P |
| 11.2.3 | Temperature rise of accessible parts                                                               | (see appended table 11.2 of CB reports 17038530 001 and 17038530 002) | P |
| 11.2.4 | Temperature rise of parts, other than windings and printed boards, providing electrical insulation | (see appended table 11.2 of CB reports 17038530 001 and 17038530 002) | P |
| 11.2.5 | Temperature rise of parts acting as a support or mechanical barrier                                | (see appended table 11.2 of CB reports 17038530 001 and 17038530 002) | P |

You can see clause 11.2.3 (The example shown on page 2) has been marked “Pass”, along with a couple of others. In reality there will be a row like this on the report for every clause in the standard, and reports are typically 100+ pages long.

(You are unlikely to ever see a clause marked “F” because the supplier normally wouldn’t send it to you if it fails. It’s a case of: “One strike and you’re out” with test reports!)

### Approval Certificates

(Often incorrectly referred to as “SAA Certificates”). Technically, for every electrical appliance you sell, you have an obligation to establish that it meets local safety standards, with a valid Test Report. For many products there is no specific requirement that you actually have such a document to hand, but if

there is an incident that is investigated by the authorities and they ask (as they nearly always do): “How did you actually determine that this product complies with local safety standards?” a statement to the effect of: “Er, my supplier assured me it did” is not likely to hold up terribly well in court!

However, there is a specific range of electrical products (known variously as “Declared”, “Prescribed” or “Proclaimed” articles, depending on the State) where the State electrical safety authorities simply *do not trust* suppliers to “do the right thing” with safety compliance, and suppliers are required to get a suitably authorized local body to examine the safety report and determine that all safety tests relevant to Australia have actually been carried out.

The certifying body can either be a State Government electrical safety regulator, or a private company (see later).

If the certifier is satisfied the report ticks all the required boxes, they will then issue an “Approval Certificate” similar to this example from the Certification company TÜV Rheinland:

**Certificate Number:** AZ 69022038 **Page:** 0001 **TÜV Rheinland**

**CERTIFICATE OF APPROVAL**

**Authorised marking:** TUV022038EA

This is to certify that TÜV Rheinland Australia Pty Ltd as accredited by JAS-ANZ in accordance with ISO/IEC Guide 65 has examined for compliance with certification standards, the electrical equipment described hereunder and authorises the certificate holder to affix the above mentioned mark to products of the same type; or the Regulatory Compliance Mark (RCM) provided that the requirements of all relevant parts of AS/NZS 4417 applicable to the article are fulfilled.

**CERTIFICATE HOLDER:** Shenzhen Fujia Appliance Co., Ltd.  
Bldg. B18, Xuejingchang Technology Ind. Park, Haoye Road, Xixihe Village, Fuyang Town, Baotou District, Shenzhen, Guangdong 518103, P. R. China

**DESCRIPTION OF EQUIPMENT**

**Declared class:** Power Supply or Charger

**Product:** SWITCHING ADAPTOR (direct plug-in type)

**Trade Name / Manufacturer:** Shenzhen Fujia Appliance Co., Ltd.

**Model Number:** FJ-SW00000000, FJ-SW00000000N  
(xxx.yyyy are variables, details see CONTINUATION SHEET 1)

**Rated:** Input: AC 100-240V, 50/60Hz, 1.5A, Class II  
Output: details see CONTINUATION SHEET 1

**Standard:** AS/NZS 60950.1:2015  
AS/NZS 60065:2012+A1

**Issue Date:** 11/09/2017  
**Expiry Date:** 11/09/2022

Signed for and on behalf of TÜV Rheinland Australia Pty Ltd  
Klinker

**AS/NZS 60950.1:2015**  
**AS/NZS 60065:2012+A1**

### Page 3

Australia  
[www.jaycar.com.au](http://www.jaycar.com.au)  
[techstore@jaycar.com.au](mailto:techstore@jaycar.com.au)  
1800 022 888

New Zealand  
[www.jaycar.co.nz](http://www.jaycar.co.nz)  
[techstore@jaycar.co.nz](mailto:techstore@jaycar.co.nz)  
800 452 922

Copyright ©  
2022 Jaycar



(This one certified that the report was compliant with AS/NZS standards 60960 and 60065; again, the current standard is AS/NZS 62368).

Approvals from suppliers normally carry information about the factory where the product was made, the Trade Name and Model Number of the product it refers to, the standards the Test Report covers, plus issue and expiry dates.

Most approvals only last for 5 years and then they have to be “renewed”. If you think of the approval as being like a car registration, the Test Report is like the vehicle inspection certificate (eg “Pink Slip”) required in some States to register a car.

## These products all require current Approval Certificates for sale in Australia (2020 list):

1. Air conditioner using flammable refrigerant (from 1 July 2020).
2. Appliance connector
3. Arc welding machine
4. Bayonet lamp holder
5. Bayonet lamp holder adaptor
6. Electric Blanket or throw Rug.
7. Bread toaster (portable)
8. Building (Fixed wiring) cable
9. Clothes dryer (cabinet)
10. Clothes dryer (rotary, tumbler)
11. Control or conditioning device
12. Cooking appliance – portable type
13. Cord extension socket
14. Cord-line switch
15. Decorative lighting outfit (chains)
16. Dishwashing machine
17. Double Capped LED light (fluorescent tube replacement)
18. Edison screw lamp holder
19. Electric Fan
20. Fence energizer (Battery or mains)
21. Flexible heating pad
22. Floor polisher and scrubber
23. Fluorescent lamp ballast
24. Fluorescent lamp starter
25. Glue Gun (from 1 July 2020)
26. Hair care appliance
27. Hedge clipper

28. Immersion heater
29. Insect electrocutor
30. Inspection hand lamp
31. Iron (clothes, includes fabric steamers)
32. Kitchen machine
33. Lawn care appliance
34. Liquid heating appliance
35. Luminaire (portable, child appealing and/or with exposed metal parts)
37. LED lamp - incandescent replacement type (from 1 July 2020)
38. Massage appliance
39. Microwave oven
40. Miniature over-current circuit breaker
41. Nightlight with integral plug (from 1 July 2020)
42. Outlet device
43. Plug
44. Power supply or charger
45. Projector
46. Range
47. Range hood
48. Razor / hair clipper
49. Refrigerator/Freezer (except wine coolers)
50. Residual Current Device (fixed or portable)
51. Room heater
52. Sewing machine
53. Socket / outlet
54. Soldering iron
55. Supply flexible cord
56. Swimming pool/spa equipment
57. Television receiver (CRT Type)
58. Therapeutic lamp
59. Tool (hand-held type)
60. Vacuum cleaner
61. Wall switch
62. Washing machine
63. Water bed heater
64. Water heater (instantaneous type)

**Most approvals last for 5 years but a few high-risk products (eg hair straighteners), have a shorter approval period.**

At Jaycar, most of the time you will only be interested in these items:

- External power supplies (plugpacks etc)
- Battery Chargers
- Portable Outlet Devices (powerboards etc)
- AC Plugs
- AC Cords

**Page 4**

Australia  
[www.jaycar.com.au](http://www.jaycar.com.au)  
 techstore@jaycar.com.au  
 1800 022 888

New Zealand  
[www.jaycar.co.nz](http://www.jaycar.co.nz)  
 techstore@jaycar.co.nz  
 800 452 922

Copyright ©  
 2022 Jaycar



- AC Appliance Connectors
- Soldering Irons

It's important to understand that AC lead components (AC plugs, cords etc) have their own approval certificates, separate from the approval for the device itself.

As an example, here is a typical 3-pin power lead, of the type commonly supplied with "Brick" type power supplies. The plug, cord and appliance connector are all declared articles and each has to have its own approval certificate.

*Note that these are completely separate from the approval certificate for the power supply itself!*

So if you are sourcing a brick type power supply that comes with its own power lead, you would need four Approval certificates.



### There are many pitfalls involving Approval Certificates.

Too many people seem to think that once they've gotten and filed away an Approval Certificate, they're home free. Nothing could be further from the truth; *getting certification is **not** like stamp collecting*; you also have to establish that the Approval you've been given is actually applicable to the product you've been shipped! That is, you have to have a product that is "constructed identically" to the sample that was actually tested to get the Test Report, that was in turn submitted to get the Approval.

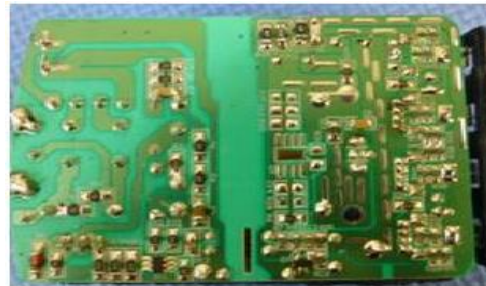
This can be difficult, as Government inspectors are authorized to demand copies of any test reports submitted to Approval Bodies, but unless we were the ones who actually applied for and paid for the approval, we don't get the same privilege! This can be a real problem if we don't get a copy of the Safety Report from the manufacturer, or the one they give to us is not the one that was used to get the Approval Certificate.

### This is what can (and does!) happen:

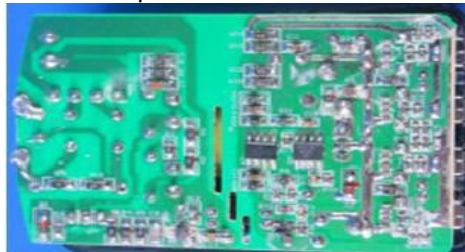
1. An inspector goes into a retailer and obtains sample(s) of their Declared Articles.
2. They submit the sample(s) to a local Test Lab and get a report(s) made to the same standard that appears on the Approval Certificate.
3. They then contact the issuer of the Approval Certificate and demand a copy of the Test Report that was submitted to get that Approval Certificate.
4. They then compare the two reports and look for any discrepancies. If they find any significant ones, then the Approval is deemed invalid, at least for the versions of the Declared Article that the retailer is selling.
5. They then issue a hefty fine (typically ~\$3,000 per infringement) and order that all stock be withdrawn from sale.

### Here is an example of just such an incident:

This is the circuit board from a USB plugpack power supply, as was shown on the Test Report that was submitted to get the Approval Certificate:



But *this* is what was shown in the *new* Test Report that the inspector had commissioned:



Although the left-hand side layout is fairly similar, you can see that the right-hand side *is completely different*. Any significant change to the design invalidates the Approval (at least for that version of the product). Basically, we were selling an unapproved product....

#### Some Frequently Asked Questions:

**Q:** Does there have to be a customer incident for the regulator to investigate?

**A:** No.

**Q:** Does the fact that the regulator's report shows that the revised product still meets safety standards make any difference?

**A:** No.

**Q:** Does the fact that your supplier has signed a Supplier Contract guaranteeing that the product is safe and compliant make any difference?

**A:** No.

Basically it's a case of "You sold it; you made it!"

#### Approval Numbers and ERAC

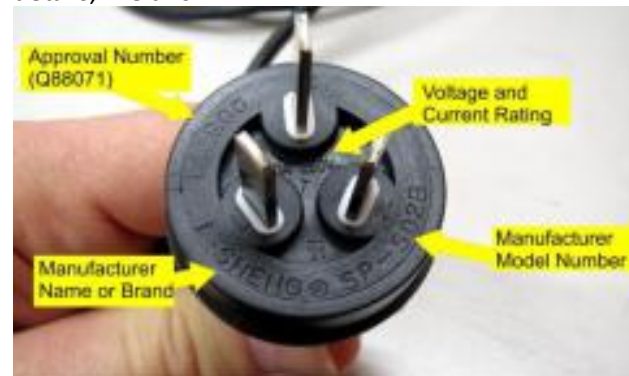
Obtaining Electrical Approvals used to be a fairly straightforward matter. They were originally only issued by the various State Electrical Safety authorities, and in the old days, it was usually the device itself that was submitted, rather than a Test Report. The range of Declared Articles was also much smaller then, mostly just rewirable AC plugs and sockets, and heating appliances.

Originally the States all had their own electrical regulations, but eventually these were "harmonized" so that all States had virtually identical electrical regulations, and more importantly, an Approval issued in any State was automatically recognized in any other State. The original Approval numbers simply consisted of an initial letter followed by a number. For example NSW Approvals started with "N" – N12345, Victorian ones with "V" – V12345, Queensland ones started with "Q" and so on.

Later, with the increasing range of declared articles and the need for more complex testing, State government regulators moved toward the current model of only reviewing Test Reports, rather than

actual physical testing. It was then argued that Test Labs should also be qualified to do this, and private "Certification Bodies" began to appear, such as UL, SAA Approvals and SGS.

Originally, all Declared Articles were required to be marked with their Approval number and other details, like this:



The biggest problem with that system was that if the approval had expired, any product marked with that approval number could no longer legally be sold.

Most Approval bodies are prohibited from renewing approvals that have expired, so the only options were either re-working the stock with over-stickers (not always possible), or scrapping the stock.

#### ERAC (ELECTRICAL REGULATORY AUTHORITIES COUNCIL)

In recent years a new system has been introduced where details of approvals are uploaded onto a publicly-accessible database. By entering the model number and/or the manufacturer's name, you can access details of the product's approval status, expiry date and so on.

All that has to be displayed on the product is a model number and an RCM (Regulatory Compliance



Mark). The great advantage of this system is that if an approval is

inadvertently allowed to expire, a new Approval number can be organized, and it will automatically appear on the EARC database.

However, there are currently a few problems with the system.

First, and possibly the most important, the NSW

State regulators currently do not fully support ERAC. Therefore, if a product has an NSW approval number, for the time being it must be marked on the product as before. You can easily look up NSW approvals here:

<http://eapr.fairtrading.nsw.gov.au/CertificateSearch.aspx>

Up until July 1 2020 the NSW authorities allowed products to be sold in NSW that were only marked with an RCM, as long as the approval information was available from ERAC. (This has now changed, see page 10).

You can look up non-NSW approvals here:  
<https://equipment.erac.gov.au/Public/>

Be warned; the search function on that database is rather poor. Minor differences in punctuation or layout from what is on the approval certificate will routinely generate "not found" messages. So if a product's model number was registered as AB-1234 or AB 1234, AB1234 (without the hyphen or space) has about as much chance of being found as 乱七1234!

However, if you just entered "1234" the correct answer *might* appear in the list of hits....

Also, for some reason they stopped searches based on just the approval number, but you can over-ride this by putting a % sign in the "Applicant," "Trade Name," or "Model" fields eg:

#### Search Criteria (Please make sure either Applicant or Model Number is entered)

|                    |                                            |       |
|--------------------|--------------------------------------------|-------|
| Certification No : | <input type="text" value="GMA-500554-EA"/> | Equip |
| Certifier :        | <input type="text" value="Select..."/>     | Equip |
| *Applicant :       | <input type="text" value="%"/>             | Class |
| *Trade Name :      | <input type="text"/>                       | Descr |
| *Model Number :    | <input type="text"/>                       |       |

#### Search Results

1 results

| Approval #                       | Application Type | Applicant                             |
|----------------------------------|------------------|---------------------------------------|
| <a href="#">GMA-500554-EA/00</a> |                  | Shenzhen Sunshine Technology Co., Ltd |

Page 7

Australia  
[www.jaycar.com.au](http://www.jaycar.com.au)  
techstore@jaycar.com.au  
1800 022 888

**This is the basic process for a routine Approval application:**



Copyright ©  
2022 Jaycar

**jaycar**

New Zealand  
[www.jaycar.co.nz](http://www.jaycar.co.nz)  
techstore@jaycar.co.nz  
800 452 922

This is the process generally used where a report to a European safety standard is supplied. This is known as the "Top Up" process:

## "TOP UP" APPROVAL PROCESS

PRODUCT HAS TO BE RE-TESTED TO COVER ANY AS/NZS CLAUSES NOT COVERED BY THE EUROPEAN STANDARD



7

(CAN BE ORIGINAL LAB OR A DIFFERENT LAB)



A "TOP UP" REPORT IS GENERATED COVERING THE BITS NOT COVERED BY THE EURO STANDARD

8



ORIGINAL AND TOP-UP ARE RE-SUBMITTED TO CERTIFICATION BODY

9



eg SAA APPROVALS  
SGS  
ENERGYSAFE VIC  
NSW FAIR TRADING

IF IT ALL CHECKS OUT THEY ISSUE THE APPROVAL CERTIFICATE

10



In general, European safety standards are very similar to the AS/NZS versions, but Australian standards include extra tests, mostly to do with temperature rise, as it gets a lot hotter here than in Europe. Ideally, the European test report would be also marked with the AS/NZS equivalent like this,

Standard .: IEC 60950-1:2005 (Second Edition) + Am 1:2009 + Am 2:2013

AS/NZS 60950.1:2015

which indicates that all Australia-relevant tests have been carried out.

However, it is also acceptable if the Australian "National Differences" are simply mentioned somewhere in the report, so when you do a word search for "Australia" you get something like this:

## ATTACHMENT TO TEST REPORT IEC 60950-1 AUSTRALIA and NEW ZEALAND NATIONAL DIFFERENCES Information technology equipment – Safety – PART 1: GENERAL REQUIREMENTS

according to.....: AS/NZS 60950.1:2011 and Amendment No. 1  
to AS/NZS 60950.1:2011

## THE EESS SCHEME

The ERAC scheme has a lot to recommend it, but it has spawned yet another agency which has come in for its share of criticism. The Electrical Equipment Safety System EESS is supposed to enhance consumer safety, but some see it as an unnecessary extra layer of bureaucracy and expense.

EESS works in conjunction with the ERAC database. In most states now, any company who sell a product that is registered on the ERAC database are required to register themselves on the EESS as a "Responsible Supplier" for that product.

That of course costs money to do, and the registration only lasts so long and then must be renewed. Not only that, "Responsible Suppliers" also have to register themselves, and also, if they

trade under different names, each name requires another registration! (So we have to have registrations under Electus and Soanar for example). And, this registration also costs money, plus you have to renew it every few years. Some doubt has been expressed what the consuming public actually gets from all this “dues paying.” This is a legitimate question, given that nearly all incidents involving faulty electrical products involve totally non-compliant products imported by small operators who know nothing about any of this! There is also very little consumer awareness of the system.

Here is a basic flowchart of the ERAC/EESS process, once the Approval certificate has been issued (that is, the product is “Approved”).



## Here's the current EESS Schedule of fees:

### Registration as a Responsible Supplier

\$204.50 (per year)

### Registration of In-Scope electrical equipment

#### Level 2 or 3:

|         |          |
|---------|----------|
| 1 year  | \$76.65  |
| 2 years | \$153.30 |
| 5 years | \$383.20 |

So basically an importer of “In Scope” electrical devices has to first pay \$204.50 per year to be registered as a “Responsible Supplier” and then pay another \$76.65 per year for every item they sell. (Or if you register it for 5 years you save 5 cents....)

### What does “In Scope” mean?

This is not entirely clear. Currently all “Level 3” devices (ie declared articles) are “In scope” “Level 2” devices are lower risk 240V devices, that are not declared articles. But at present, only Air Conditioners, TV sets and “simple luminaires” (mainly table lamps) require registration, so we don’t need to worry. “Level 1” devices are ones not mains operated, registration is optional and free.

A fortunate exception is made-up power leads. While they require three separate Approvals, it is not necessary to register the three separate components on the EESS.

## New Zealand sDoc (Statutory Declaration of Compliance)

Apart from the requirements for having a valid Approval Certificate for Declared Articles, (Same as Australia), New Zealand Consumer Law has a further requirement. All importers of medium and high risk electrical articles (basically, anything 240V operated) have to fill out a special declaration that describes the product, details of the importer, and basically, the certification on which they declare the item to be safe. This has to be signed by an officer of the company who is normally resident in New Zealand, and a copy made available to anybody who asks for it.

## RECS and REAS CERTIFICATION

New changes introduced by the NSW Office of Fair Trading (issuers of “NSWxxxxx” approvals) have now introduced further complications. These stem from the different regulatory frameworks applying to the different States, which have produced a number of “grey areas.”

### Historical Background

Originally, approval certificates were only issued by State Electrical Authorities, and usually, the product itself was submitted for approval. There were only a few declared articles then, (lights, heaters and a few household appliances).

With the enormous upsurge in the range of appliances now available, they have all moved to certifying Test reports rather than the products themselves.

So they now only certify whether or not a product's test report covers all testing required by the current Australian safety standard; it's still up to the importer to verify that what they are being shipped actually matches what is in the report!

All State Government Electrical authorities now also allow private certification companies to issue Approval Certificates, and have done so for some years. (Examples are SAA Approvals, UL, EESS Approvals etc). However, there are subtle differences in the different State requirements.

NSW works under what is commonly called “REAS,” which stands for “Recognized External Approval Scheme,” (commonly pronounced: “Ree-Az”), Queensland and other signatories to the EESS operates under “RECS,” which stands for “Recognized External Certification Scheme,” (commonly pronounced: “Rex.”)

What's the difference? Well, RECS is designed to be a part and parcel of the EESS scheme. In particular, their policy is that any member of the general public should be able to look up a model number of an “in scope”

electrical article, and check its approval status.

That's OK if the approval certificate has only a single model on it, such as a heater or power board, but with a lot of products we deal with, (in particular, plugpack Power Supplies), the approval can cover a whole “family” of models, which differ only in their voltage and current ratings.

Under the NSW REAS rules the “model number” shown on the Approval Certificate can be something like “ABC-xxx-yyy-ZZ,” where “xxx” denotes the voltage expressed as tenths of a Volt, “yyy” denotes the current in tenths of an Amp and “ZZ” usually denotes some sort of case variant.

So, for example, a 5 Volt 2 Amp power supply could be denoted as something like “ABC-050-020AU.”

That is:  $050 \times 0.1V = 5V$ ; and  $020 \times 0.1A = 2A$ .

“AU” might just denote the model has Australian-type power pins.

Similarly, a 12 Volt 1 Amp version would be denoted as something like “ABC-120-010AU.”  $120 \times 0.1V = 12V$  and  $010 \times 0.1A = 1A$ .

The problem with that is that if somebody wants to check the registration details of a Plugpack that is marked “ABC-120-010AU,” and the model shown on the Approval certificate (and hence stored the website) only shows something like: “ABC-xxx-yyy-ZZ,” then the product search almost certainly won't find it!

For that reason, REAS certificates require that the Approval number be directly marked on the product's rating label.

To address this issue, the States that support the EESS scheme, have declared they prefer approvals that conform to the RECS standard, meaning the Approval Certificate has to list *every model variant* in full, which in practice means an Approval Certificate can run to several pages!

In NSW REAS certificates are still allowed to use “generic” model numbers (eg ABC-xxx-yyy-ZZ), because REAS approved products are still required to show the approval number.

### So, is there any way to register a REAS certified product on the EESS database?

Yes, but it’s complicated. You need to get the owner of the REAS certificate to contact the NSW Office of Fair Trading, and get them to confirm that your particular model variant was listed on the Approval application. Then they will accept the entry.

### Can certifiers issue both types of certificate for the same product?

Yes and no. Some certifiers can issue Approvals stating that the product is compliant to both RECS and REAS, but others are only licensed to issue RECS certificates.

### Discrepancies between Approval Certificate model numbers and product labels.

A further complication that has arisen with EESS registration is that the model being registered by a “responsible supplier,” must carry a model number that precisely matches one that appears on the Approval Certificate. Quite often, Approvals only show the OEM model number; not the model that the Australian importer is selling them under. It is not possible to register a product on the EESS database unless there is a match.

The options are

- A. Get the supplier to have the Approval Certificate amended to include the Australian model number they are being sold under
- B. Arrange to have the OEM model number added to the rating label.

The above issues are still very much a “work in progress, as of March 2022.

## Page 11

Australia  
[www.jaycar.com.au](http://www.jaycar.com.au)  
techstore@jaycar.com.au  
1800 022 888

New Zealand  
[www.jaycar.co.nz](http://www.jaycar.co.nz)  
techstore@jaycar.co.nz  
800 452 922

Copyright ©  
2022 Jaycar

