



Changes to Certification and its Impact on Manufacturers

Des McDonell
CSE-Ex Pty Ltd



PRODUCT CERTIFICATION IN AUSTRALIA

- Up until 1993 we had the P-3 Scheme.
- This was an “Approval Scheme” and NOT a certification scheme.
- A manufacturer obtained a Test Report from a Test House and this was considered by a committee of Regulators and was approved for use In Australia.



PRODUCT CERTIFICATION IN AUSTRALIA

- From 1993 the P-008 scheme known as AUS Ex was introduced.
- This was a certification scheme where a certificate was issued to show compliance with a standard.
- In both these schemes a manufacturer signed an “UNDERTAKING” to manufacture product the same as the Type Test Sample.
- There was no ongoing Surveillance.



PRODUCT CERTIFICATION IN AUSTRALIA

- In 1999 the first quality based scheme was introduced by the IECEx mutual recognition of Assessment and Test Reports (ATR's)
- In 2001 the ANZ Ex scheme was introduced for Australia and New Zealand.
- Since August 2003 Manufacturers have been able to apply for an IECEx Certificate of Compliance.



PRODUCT CERTIFICATION IN AUSTRALIA

- The ANZ Ex scheme is a mirror image of the IECEx scheme.
- Both are ISO Type 5 certification schemes to ISO/IEC Guide 67.
- Both involve ongoing surveillance of a manufacturer to ensure the product manufactured is the same as the Test Sample submitted.



PRODUCT CERTIFICATION IN AUSTRALIA

- This gives a Manufacturer two options:
 1. They can opt for **ANZ Ex**
(however this is only acceptable in Australia and New Zealand)
 2. They can opt for **IEC Ex**
(This is acceptable in (various forms) by all Member countries of the IEC Ex.
26 to date.)



PRODUCT CERTIFICATION IN AUSTRALIA

- In both cases a Manufacturer has to work with ongoing surveillance of his production.
- This is the major difference to what was done in the past.
- The Manufacturer bears the added cost of this surveillance.



PRODUCT CERTIFICATION IN AUSTRALIA

- However it is not all bad.
- The 10 year validity period is now gone
- They can get access to markets outside Australia without having to get the local certification.
- Statistically it has been shown that they have less spoilt work which can be a cost reduction.



PRODUCT CERTIFICATION IN AUSTRALIA

- The frequency of the surveillance visits depends on whether the Manufacturer has an audited Quality assurance system to ISO 9001 in place.
- If the Manufacturer has this then he is audited once every twelve months and the certification audit is an added element to the routine QA audit



PRODUCT CERTIFICATION IN AUSTRALIA

- The Initial Product certification audit will be carried out by the ACB issuing the certificate.
- For subsequent Annual audits the ACB can enter into an agreement with the QA service provider to conduct the ongoing audits using a technical specialist if required.



PRODUCT CERTIFICATION IN AUSTRALIA

- By using this process any disruption that may be caused by an audit can be minimized and since it is an added element to a routine audit there can be some cost savings.
- The focus of the certification audit is on the processes that prove that the product as produced is the same as that which was tested.



PRODUCT CERTIFICATION IN AUSTRALIA

- Where a Manufacturer does not have an audited QA system in place then they would be subject to six monthly audits by the ACB issuing the certificate.
- This would cover all facets of manufacturing to ensure that the product was the same as the Test Sample.



PRODUCT CERTIFICATION IN AUSTRALIA

- There is provision in MP87 for a **“Restricted Certificate”** to cover a one off situation.
- This does not have the QA and surveillance requirements
- It is for a one off with the certificate identifying, by serial number or otherwise, the item covered and its location.



PRODUCT CERTIFICATION IN AUSTRALIA

- IECEx moved from the use of ATR's to the issue of IECEx certificates of conformity on August 1st 2002.
- Since that time there have been Approx.1300 plus certificates issued internationally and Approx.80% of these have been issued in Europe.
- To date Australian ACB's have issued approximately 172 IECEx Certificates and there are more going through the process.



PRODUCT CERTIFICATION IN AUSTRALIA

- SIMTARS in Queensland issued the first IECEx certificates in the world for Ex d Flameproof protection.
- They were issued to CSE-Ex Pty Ltd for a range of flameproof enclosures.
- The QA audit was used by SIMTARS for their own JAS-ANZ audit for the IECEx scheme.



PRODUCT CERTIFICATION IN AUSTRALIA



PRODUCT CERTIFICATION IN AUSTRALIA

- Apptek International Pty Ltd have used the IECEx scheme to obtain other European and American approvals.
- In case one covering their “Oialog” type 1 logger which is for use in the sewerage industry they used SIMTARS to do the testing and produce an ATR.
- This was then used to get ATEX approval through NEMKO in Norway.



PRODUCT CERTIFICATION IN AUSTRALIA

- For another Product they used ITACS in Adelaide to do the testing and produce a test report on their “Oialog” type 6000 Gas Monitor.
- Since ITACS were not an IECEx ACB at the time they used SIMTARS to convert the ITACS test report into an IECEx ATR.
- This was then used to obtain UL approval in USA



PRODUCT CERTIFICATION IN AUSTRALIA

- ITACS have now been accredited as an IECEx ACB and they have issued an IECEx certificate for this product.
- So you can see the scheme does work Internationally and Australian Manufacturers can use it to access International Markets.



PRODUCT CERTIFICATION IN AUSTRALIA

- The adoption of IEC standards has other implications for Manufacturers.
- The latest edition of IEC 60079-0 which is about to be published as AS/NZS in clause 28 “Manufacturers Responsibility” states that a manufacturer shall prepare or have prepared a certificate confirming the apparatus is in conformity with the standards
- It also mentions Responsibility for marking



PRODUCT CERTIFICATION IN AUSTRALIA

- Clause 30 of the same standard states:
“All electrical apparatus shall be accompanied by instructions including the following as a minimum”
- Marking information except for serial No
- Information to facilitate maintenance



PRODUCT CERTIFICATION IN AUSTRALIA

- Instructions for safety, i.e.
 - putting into service:
 - use:
 - assembling and dismantling:
 - Maintenance (servicing & repair):
 - installation:
 - adjustment:
- Where necessary, training instructions



PRODUCT CERTIFICATION IN AUSTRALIA

- Details to allow a safe use decision
- Electrical, pressure & other limit values
- Special conditions of use including any misuse experience has shown may occur
- Characteristics of tools which may be fitted to the apparatus
- List of standards including issue date.

PRODUCT CERTIFICATION IN AUSTRALIA

- The standard does not specify the means of providing this information.
- It could be provided in hard copy or equally it could be provided by means of the manufacturer's website or alternatively on a CD.



PRODUCT CERTIFICATION IN AUSTRALIA

- While these changes have an effect on our local market.
- however they bring us into alignment with IEC and therefore other parts of the world
- And these changes allow Australian manufacturers access to other markets around the world.

