Changes to Certification and its Impact on Manufacturers

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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.
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• 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.
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• 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.
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• 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.
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• 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.)
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• 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.
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• 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.
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• 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.
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- 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.
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• 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.
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• 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.
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• 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.
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• IECEx moved from the use of ATR’s to the issue of IECEx certificates of conformity on August 1\textsuperscript{st} 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.
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• 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.
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• Apptek International Pty Ltd have used the IECEx scheme to obtain other European and American approvals.
• In case one covering their “Odalog” 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.
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• For another Product they used ITACS in Adelaide to do the testing and produce a test report on their “Odalog” 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
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• 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.
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• 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.
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• 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
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• Instructions for safety, i.e.
  - putting into service:
  - use:
  - assembling and dismantling:
  - Maintenance (servicing & repair):
  - installation:
  - adjustment:

• Where necessary, training instructions
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- 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.
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• 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.
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- 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.