PRODUCT SAFETY:
Testing to product standards—principles for test organisations
February 2014
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Introduction

Testing a product for compliance with a standard or to substantiate other claims made by the manufacturer requires expertise, attention to detail and a good understanding of voluntary and mandatory product safety standard requirements.

Many suppliers lack the necessary resources to undertake their own product assessment and are therefore reliant upon third-party laboratories for the facilities and expertise required to determine whether a product complies with a standard. Test reports from such can also provide the basis for product certification under accredited schemes.

Together with state and territory fair trading agencies, the Australian Competition and Consumer Commission (ACCC) is responsible for enforcing the Australian Consumer Law (ACL) and expects test laboratories to meet high standards of performance and professionalism in their work. Test laboratory reports may be used by the ACCC in administering its compliance and enforcement functions and may also be used by suppliers seeking to demonstrate compliance with ACL requirements.

The principles in this publication provide important information for testers who are commissioned by suppliers or the ACCC to test whether a product complies with a mandatory standard. The principles are for general guidance and do not constitute legal advice.

The principles also provide important information about some of the steps testing agencies can take towards assuring the validity and value of the tests they perform.

In the event that legal or other expert advice is required about any matter contained in these principles, the testing agency should consult an appropriately qualified professional.
Background

The Australian Consumer Law

The ACL is a single national law aimed at protecting consumers and promoting fair trading in Australia and forms part of the Competition and Consumer Act 2010. The ACL includes a number of provisions which are relevant to product testing, in particular a national product safety regime, a consumer guarantees regime and rules about specific types of conduct.

Product claims

Under the ACL, product claims on labelling, packaging or promotional material, including claims made about the product’s compliance with mandatory and voluntary standards, must be able to be substantiated. Specifically, the ACL prohibits businesses from giving a false or misleading impression about their goods or services. Businesses must not engage in conduct that misleads or deceives or is likely to mislead or deceive and must not make false or misleading representations about the quality or characteristics of its goods or services, including its:

- history
- place of origin
- standard, quality, grade, nature or composition of or manufacturing process
- sponsorship or approval
- performance characteristics.

Product testing may be sought to substantiate claims about goods’ or services’ compliance with relevant standards, as well as about:

- environmental impacts, emissions or efficiency
- nature and extent of ingredients, components, additives or allergens
- country or place of origin of ingredients or components
- extent of genetic or other technological modification involved in production
- health benefits or impacts.

Mandatory standards and bans

Under the ACL, a supplier must not supply a product that does not comply with a mandatory standard or ban.

The Commonwealth Minister may make standards mandatory for certain consumer goods and product related services, or to ban the good or service completely. Many, but not all, mandatory safety standards are based upon voluntary Australian standards published by Standards Australia.

When testing a product, testing laboratories should be mindful that the mandatory standard may:

- adopt a voluntary standard with no variation
- adopt historical versions of a voluntary standard
- vary the scope and/or testing requirements of a voluntary standard
- take up some, but not all aspects of a voluntary standard (generally, mandatory standards will only adopt safety requirements of voluntary standards)
It is, therefore, essential that:

- the customer’s requirements are clearly articulated and understood by both parties prior to commencement of testing—this needs to include clarification of any limitations of laboratory capability
- the laboratory staff are aware of—and have access to copies of—the mandatory standard and the appropriate edition of the voluntary standard
- the test report clearly states whether the product has been assessed against the mandatory standard and refers to the existence of broader product safety regulatory requirements
- compliance statements are clear and unambiguous.

Reliable test results need to be:

- competent and proficient laboratory staff
- validated test procedures
- appropriately calibrated and maintained test equipment
- suitable testing environments
- representative samples which are adequately prepared for testing
- effective record maintenance
- clear and unambiguous reports
- appropriate systems underpinning the tests.

**Complying with the ACL**

The ACL creates requirements for testing laboratories when offering a testing service. In particular, testing agencies must:

- not misrepresent their testing services
- be honest and accurate when describing testing services—in particular, whether they are able to test to a certain standard and whether this is in part or in total.
The test process: The importance of ‘getting it right’

Together with state and territory fair trading agencies, the ACCC is responsible for enforcing the consumer protection provisions of the ACL.

Investigation into alleged breaches of the ACL often involves gathering evidence for use in court proceedings. When the ACCC commissions a test company to test a product’s compliance with a mandatory standard, that company must meticulously observe all stipulated procedures relating to the handling and testing of the product. Such care is imperative because the product and the results of the testing may well form an essential piece of evidence in an ACCC legal proceeding. Accordingly, test companies must follow all required processes including those which maintain and preserve the integrity of the product as a potential source of evidence.

International Standard for testing procedures and systems

The International Organization for Standardization (ISO) has published a standard that deals with test laboratory procedures and systems: International Standard ISO/IEC 17025-2005, ‘General requirements for the competence of testing and calibration laboratories’.

This standard specifies requirements for laboratories and is used as the basis for laboratory accreditation in Australia and many other jurisdictions. Laboratory accreditation uses peer-assessment to confirm the competence and capability of test laboratories to carry out specific tests and/or calibrations.

In Australia, National Association of Testing Authorities (NATA) undertakes laboratory accreditation across most disciplines.

This publication, including the principles outlined below, draws on the content of ISO/IEC 17025-2005 and we strongly recommend you read the full standard for more information.
Principles

Handle and store test products securely

Secure handling and storage is essential for all test products, particularly when testing may form part of the evidence in a court proceeding. Test laboratories are responsible for products in their care and they must be able to testify as to the identity of specific samples delivered to them. To enable this to occur, a careful record must be made of the following:

• the condition of the product upon receipt
• the unique identifiers of the product (for example, the serial number, name, brand) or unique identification provided by the supplier
• the full details of what the product comprises, including all components, accompanying material, hardware and tools for assembly, as well as packaging
• any identification marks applied by the ACCC.

It is critical that appropriate security measures are taken to restrict access to the product.

It is strongly recommended that appropriate photographs be taken that might assist in demonstrating the condition upon receipt of unique identifiers or characteristics.

Maintain the integrity of the goods

As with handling and storage, the integrity of goods must be maintained. Testers must:

• condition and use the samples strictly in accordance with the manner prescribed in the standard
• keep each sample and its component parts together. Testers must not allow these to mix with other samples
• assemble the goods (where necessary) according to instructions supplied
• be able to link the sample tested with the results recorded
• not tamper with or mishandle the product in any way except where prescribed testing includes simulated product abuse. For example, in the case of testing a vehicle jack for compliance with the mandatory standard, the testing process may subject the jack to unusual or abnormal stresses.

Ensure calibration and maintenance of instruments and up-to-date equipment

Calibration is a fundamental prerequisite to reliable testing. Laboratories must have a system in place to maintain standards of calibration. Correct calibration (relevant to the tests being performed) must be in place for the tests to be accurate and reliable. Failure to calibrate effectively will at best impugn the integrity of the test results, and at worst render the results invalid.
Quality assurance system

Test laboratories should implement a system to ensure the quality of their operations is achieved and maintained. ISO/IEC 17025 has requirements for an appropriate laboratory management system.

Follow the standard as laid down. Follow the test request.

Before commencing the tests, gather the necessary documents. This will include careful consideration of the:

- written test request
- the mandatory standard
- correct edition of the published standard (and any relevant amendments)\(^1\)
- any supplementary standards.

Any instructions contained in these documents must be explicitly followed. Particular attention is needed where the mandatory standard differs from the referenced standard as published.

Some standards contain multiple requirements in particular clauses, each of which must be observed to ensure the test is properly carried out. Care must be taken to follow each element of a clause. This can include where tests apply to different product configurations, such as product conditioning, or with and without accessories fitted.

Not all requirements are strictly “tests”. Many requirements are determined by examination against the stated criteria. For example, labelling is often important to safety requirements and will need to be assessed.

If test procedures are not mandated

Standards sometimes do not specify performance tests or assessment criteria. These elements nonetheless form part of the standard for which compliance must be assessed. As such, it is important to record the way in which compliance with such requirements is determined.

In such instances, the appropriate method of assessment should be agreed with the client prior to commencing the product testing. It is essential that records support the method used and are sufficient to facilitate reproducibility.

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\(^1\) If testing to a mandatory standard, the most recently published standard may not be the one that has been made mandatory.
Reports

ISO/IEC 17025 prescribes an extensive list of report elements. Additionally, product standards often prescribe elements for inclusion in a report, as well as the format.

In addition to these requirements, testing laboratories should also observe some other basic rules in reporting the conditions, procedures and results of their testing and assessments:

- Any accreditation the company has must be accurately conveyed in the manner prescribed by the accreditation body (usually incorporating a logo and statement of accreditation). This means conveying the precise nature of the accreditation and not implying any coverage beyond that identified in the laboratory’s scope of accreditation.
- Opinions included in the report should be noted as such.
- Compliance statements must be precise and consistent with the edition and amendment status of the standard and also any limitations in the testing undertaken. Reports must include information about the goods supplied, including meaningful descriptions and identification references such as photos, assigned ID numbers and record of components, packaging, printed material and assembly kits.

Check the report for accuracy and completeness before providing it to the client. Simple errors such as spelling mistakes detract from the credibility of the results reported and may harm the reputation of the testing company.

The ACCC strongly recommends that test reports include a statement alerting suppliers that other legislative requirements may apply to their product under the ACL.

Confidentiality

As test laboratories are often party to regulatory investigations and commercially sensitive information, it is essential to ensure confidentiality at all times.
Role of testers in product safety

Test laboratories often see products in the development stages before their official release to the market. Through assessment and consultation experience, test personnel develop an understanding in product performance, design and compliance. Their advice can be invaluable in assisting suppliers to consistently achieve compliance and improve the safety of products.

Although one sample of a product may meet the requirements of a standard, this is not a guarantee of uniform compliance for the entire product line. Testers can help clients understand this and encourage them to implement means of assuring consistent compliance through effective design and quality assurance systems.

Sometimes suppliers whose product has been tested and found not to comply with a standard will ‘shop around’ several other test laboratories to see if another sample of the product can achieve a ‘pass’. Consistent application of quality testing and working to address any anomalies in standards should reduce the likelihood of clients obtaining different results between testers.

Testers can assist clients’ understanding of standards, the relevant laws and the agencies which administer them. They can also alert industry associations to any issues common within a particular area.

Test experts play a vital part in the standards-making process. Many participate and make valuable contributions in standards development. Any anomalies or interpretation issues found during testing should be reported to the standards-setting body, laboratory accreditation bodies (such as NATA) and the ACCC. If testers allow anomalies to remain unchecked and unreported, there is considerable potential for disparity between test laboratories in assessment and certification. This can have serious legal consequences for both client and tester. Clients place heavy reliance on test laboratories to ascertain compliance with a standard.

Testers can also encourage participation by clients in standards development, especially where a need for revision is identified. Suppliers are not always proactive in driving improvements to standards. Where concern is expressed about any part of the standard being impractical, ambiguous or out-of-date, suppliers should be encouraged to express their concern in writing to Standards Australia or another relevant body to instigate revision.
Further information

| **Australasian Compliance Institute (ACI)** | www.compliance.org.au  
| Peak industry body for the practice of compliance. | (02) 9290 1788  
| | admin@compliance.org.au  
| | GPO Box 4117  
| | Sydney NSW 2001 |

| **Joint Accreditation Scheme of Australia and New Zealand (JAS-ANZ)** | www.jas-anz.org  
| Government-appointed accreditation body for Australia and New Zealand, responsible for providing accreditation of conformity assessment bodies (CABs) in the fields of certification and inspection. | (02) 6232 2000  
| | GPO Box 170  
| | Canberra ACT 2601  
| | PO Box 708  
| | Wellington  
| | New Zealand |

| **National Association of Testing Authorities Australia (NATA)** | www.nata.com.au  
| Australia’s national laboratory accreditation authority. NATA accreditation recognises and promotes facilities competent in specific types of testing, measurement, inspection and calibration. | 1800 621 666 |

| **Product Safety Australia** | www.productsafety.gov.au  
| Comprehensive website for consumers and suppliers with information on safety standards and regulations, product information and education. A ‘one-stop shop’ for Australian product safety information. |

| **Product Safety Recalls Australia** | www.recalls.gov.au  
| Website providing a secure facility for online submission of recalls, RSS and email alerts of recalls, photographs and reports of recalled products, and product records dating back to 1986. |
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www.standards.com.au
1300 654 646

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**Australian state and territory agencies**

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<th>Australian Capital Territory</th>
<th><a href="http://www.ors.act.gov.au">www.ors.act.gov.au</a></th>
<th>(02) 6207 0400</th>
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<tr>
<td>Fair Trading</td>
<td><a href="http://www.fairtrading.nsw.gov.au">www.fairtrading.nsw.gov.au</a></td>
<td>13 3220</td>
</tr>
<tr>
<td>New South Wales</td>
<td><a href="http://www.productsafety.gov.au">www.productsafety.gov.au</a></td>
<td>1300 302 502</td>
</tr>
<tr>
<td>Northern Territory</td>
<td><a href="http://www.fairtrading.qld.gov.au">www.fairtrading.qld.gov.au</a></td>
<td>13 1304</td>
</tr>
<tr>
<td>Queensland</td>
<td><a href="http://www.ocba.sa.gov.au">www.ocba.sa.gov.au</a></td>
<td>(08) 8204 9777</td>
</tr>
<tr>
<td>Fair Trading</td>
<td><a href="http://www.consumer.tas.gov.au">www.consumer.tas.gov.au</a></td>
<td>1300 654 499</td>
</tr>
<tr>
<td>South Australia</td>
<td><a href="http://www.consumer.vic.gov.au">www.consumer.vic.gov.au</a></td>
<td>1300 558 181</td>
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<tr>
<td>Office of Consumer and Business Affairs</td>
<td><a href="http://www.commerce.wa.gov.au">www.commerce.wa.gov.au</a></td>
<td>1300 304 054</td>
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Australian Competition and Consumer Commission

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For more information about mandatory standards, bans, recalls and emerging issues—and to subscribe to email alerts and RSS—visit our websites:

www.productsafety.gov.au
www.recalls.gov.au

Call us

ACCC Infocentre: 1300 302 502

Callers who are deaf or who have a hearing or speech impairment can contact us through the National Relay Service: www.relayservice.com.au

Voice-only (speak and listen) users phone 1300 555 727 and ask for 1300 302 502.

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