

## CONFORMITY ASSESSMENT IN NEW ZEALAND

### Introduction

Most products or services are regulated in some way, normally to make sure that health, safety and environmental requirements are met. Even if products are not regulated, the marketplace will still often require products to meet a particular standard.

There are a series of procedures that ensure these requirements or standards are met. Products are normally tested or inspected by appropriate laboratories or inspection bodies. Providers of goods and services often need to have management systems that are independently certified. These testing, inspection, and certification activities are collectively known as conformity assessment.

The government, consumers and the business community rely on the assurance given by conformity assessment to protect public health, safety and welfare and the environment. Credible conformity assessment also supports the government's obligations under international trade agreements.

*Refer to the chart on page 4 for an overview of the New Zealand conformity assessment infrastructure.*

### Conformity assessment process

Conformity assessment is the process of deciding whether or not a product, service, process, system, person or body conforms to a standard and/or complies with relevant requirements in technical regulations or standards. Among other things, conformity assessment involves procedures for:

- Sampling, testing and inspection
- Evaluation, verification and assurance of conformance
- Registration.

### Conformity assessment bodies

Organisations carrying out testing, inspection or certification are referred to as conformity assessment bodies and comprise the following:

**Laboratories** test or measure samples or items using scientific methods to determine particular characteristics and/or compliance with standards or specifications. Laboratories can be classified as being either 'testing' or 'calibration' laboratories.

**Inspection bodies** examine individual products, services, and processes using measurement and professional judgement to establish compliance with standards or specifications.

**Systems certification bodies** certify organisations for compliance with quality management systems standards (ISO 9001) and/or environmental management systems (ISO 14001).

*Note: Organisations are never "accredited" to ISO 9001 or ISO 14001, they are "certified".*

**Product certification bodies** grant licences for manufacturers to mark their products as complying with particular standards or specifications. Decisions to grant such licences are based on test and inspection reports on prototypes or selected examples of the product, plus other criteria, e.g. packaging and labelling.

**Personnel certification bodies** certify personnel as being qualified with respect to defined criteria or standards. An example is certified auditors who undertake ISO 9000 and ISO 14001 audits.

## Accreditation authorities

Accreditation authorities accredit conformity assessment bodies. Accreditation is formal recognition that a conformity assessment body has been independently assessed by an accreditation authority in the five key areas of:

- Competence and experience of staff
- Integrity and traceability of equipment and materials
- Technical validity of methods
- Validity and suitability of results
- Compliance with appropriate management systems standards and is found to be competent to carry out its services in a professional, reliable and efficient manner.

Accredited laboratories and inspection bodies are competent to undertake specific tests or inspections (scope of accreditation) and are, therefore, entitled to issue certificates of compliance. These certificates may take the form of test or inspection reports.

Accreditation authorities are usually government-owned or government-endorsed, and operate away from any political and commercial influence. Each is peer-reviewed regularly, based on evaluations against an international standard, by other accreditation authorities from around the world.

## New Zealand accreditation authorities

Two national accreditation authorities have been established by the New Zealand Government:

### International Accreditation New Zealand (IANZ)

A Crown entity established by Act of Parliament in 1972. IANZ accredits testing and calibration laboratories, radiology services and inspection bodies to international standards.

IANZ complies with the international standard: ISO/IEC 17011:2004 *General requirements for bodies providing assessment and accreditation of conformity assessment bodies*.

Full details of IANZ accreditation may be obtained from IANZ or viewed at [www.ianz.govt.nz](http://www.ianz.govt.nz).

### Joint Accreditation System for Australia and New Zealand (JAS-ANZ)

An international body established by Treaty in 1991 and jointly owned by the Governments of Australia and New Zealand. JAS- ANZ accredits management systems, product, and personnel certification bodies to international standards.

Full details of JAS-ANZ accreditation may be obtained from JAS-ANZ, or viewed at [www.jas-anz.com.au](http://www.jas-anz.com.au)

## Trade and industry

For goods being exported and imported, regulators frequently require the testing, inspection and certification to be carried out in organisations that are accredited by the national accreditation authority. As a result, most WTO member signatories have developed similar conformity assessment structures to meet their domestic needs and to facilitate international trade. Mutual Recognition Arrangements (MRAs) have been established between accreditation authorities enabling accredited test and inspection reports and certificates of compliance to be accepted by member accreditation authorities throughout the world. Increasingly, government authorities in many countries are recognising such arrangements as meeting their regulatory requirements.

## **International co-operation of accreditation authorities**

Accreditation bodies have established regional cooperation groups that come together under the umbrella of the International Laboratory Accreditation Cooperation (ILAC). Their purposes are to exchange information, harmonise procedures and participate in Mutual Recognition Arrangements.

The co-operation groups for laboratory and inspection body accreditation bodies are:

### **International**

#### **International Laboratory Accreditation Cooperation (ILAC)**

ILAC is an international cooperation between the various regional laboratory accreditation co operations operated throughout the world. ILAC has developed an international MRA based on regional MRAs.

Go to [www.ilac.org](http://www.ilac.org) for full details.

### **Regional**

#### **Asia Pacific Laboratory Accreditation Cooperation (APLAC)**

APLAC is the regional cooperation of accreditation authorities based in the Asia Pacific region. APLAC has developed regional Mutual Recognition Arrangements for laboratory and inspection accreditation authorities.

Go to [www.aplac.org](http://www.aplac.org) for full details.

#### **European Co-operation for Accreditation (EA)**

EA is the European network of nationally recognised accreditation authorities based in the European geographical area. EA covers the accreditation of laboratories, inspection bodies and certification bodies.

Go to [www.european-accreditation.org](http://www.european-accreditation.org) for full details.

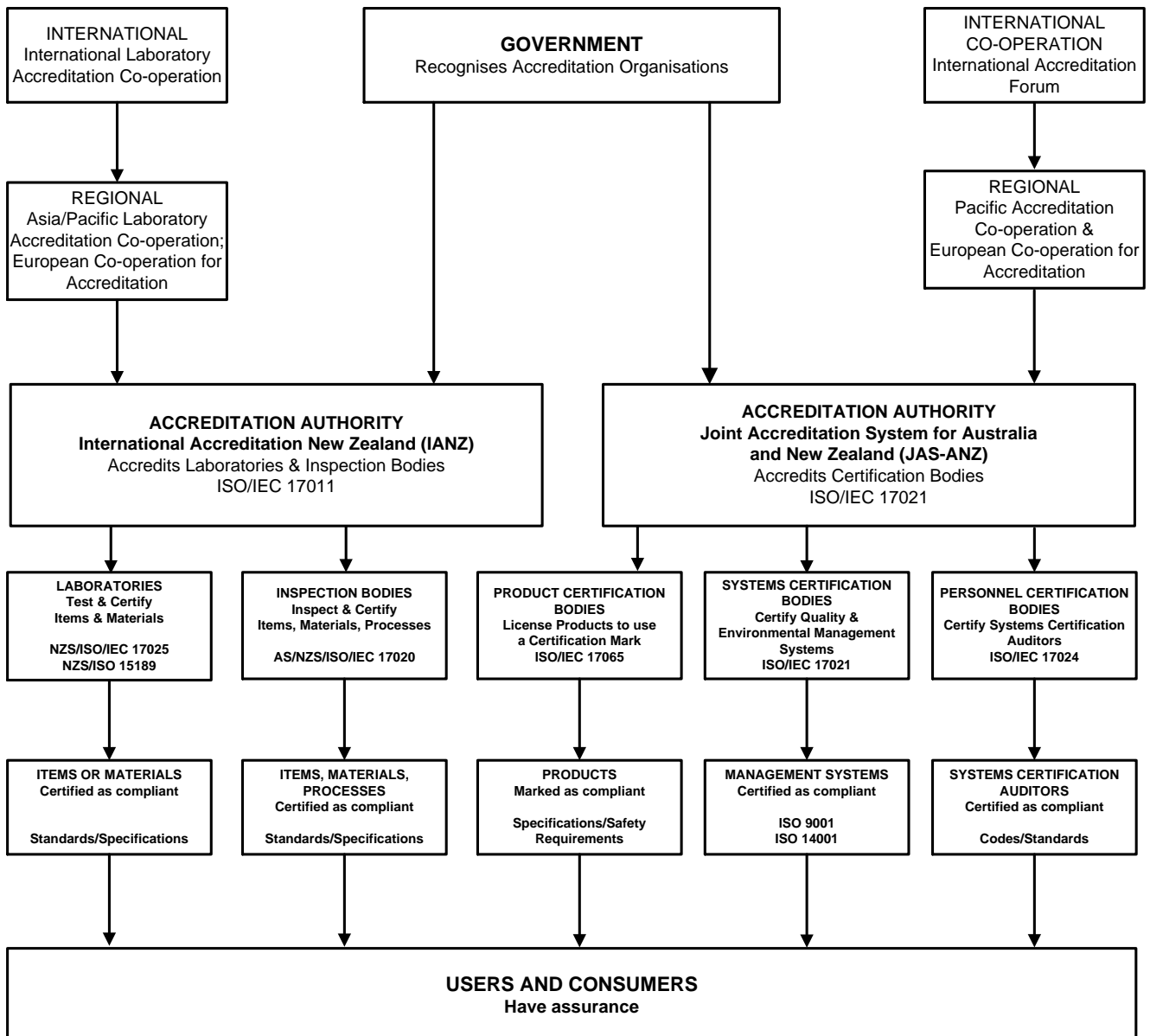
#### **Inter American Accreditation Cooperation (IAAC)**

IAAC is the network of nationally recognised accreditation authorities based in the Americas covering the accreditation of laboratories, inspection bodies and certification bodies.

Go to [www.iaac.org.mx](http://www.iaac.org.mx) for full details.

IANZ was a founding member of ILAC and APLAC, and is a signatory to their Mutual Recognition Arrangements. IANZ also has a MRA with EA for inspection bodies.

## NEW ZEALAND CONFORMITY ASSESSMENT STRUCTURE



## Standards and Conformity Assessment

Standards are specifications which define materials, methods, processes or practices. They provide the basis for determining consistent and acceptable minimum levels of quality, performance, safety and reliability. Generally, standards are voluntary compliance documents and only become mandatory if called up in legislation, regulations or in contracts.

Standards are the basis for conformity assessment. Laboratories, inspection bodies and certification bodies refer to standards when testing samples, inspecting equipment and operations, or assessing management systems. Accreditation authorities refer to standards when accrediting conformity assessment bodies.

Organisations that deal with the development of technical standards include physical standards of measurement, legal metrology and documentary standards development. These organisations form a specialised system for worldwide standardisation and have established an international and regional infrastructure (*refer to chart on page 6*).

### Documentary standards

Industries and organisations throughout the world have developed 'best practices' for the production and delivery of products and services. Through a process of consultation and consensus, many of these practices have been documented as international standards by the International Organisation for Standardisation (ISO).

**Standards New Zealand** prepares, adopts and publishes most of the commercial standards in New Zealand.

Go to [www.standards.co.nz](http://www.standards.co.nz) for details of documentary standards.

### Metrology (measurement)

Suppliers and customers use reliable measurement such as length, weight, voltage, and metering, as a basis for fair trade. To ensure accuracy for accreditation, measurements must be traceable back to the International System of Units (SI).

To demonstrate that New Zealand's national measurement standards are consistent with those in other countries, the **Measurements Standards Laboratory of New Zealand (MSL)** participates in international measurement comparisons.

Go to [www.irl.cri.nz/msl](http://www.irl.cri.nz/msl) for details of measurement standards.

### Legal metrology

Legal metrology refers to the legislated requirements for measurements, which sets the method by which goods should be sold by weight, measure, or number. Legal metrology also sets out the standards of weights and measures used to enforce traceability, and the requirements for the accuracy of equipment.

The system of weights and measures to be used in trade is administered and enforced in New Zealand by **Measurement and Product Safety Service (MAPSS)**, under the Weights and Measures Act.

Go to <http://www.consumeraffairs.govt.nz/for-consumers/goods/weights-and-measures/> for details of legal metrology.

## STANDARDS AND CONFORMITY ASSESSMENT INFRASTRUCTURE

ACTIVITY	INTERNATIONAL ORGANISATION	REGIONAL ORGANISATION	NATIONAL AUTHORITY
<b>Documentary standards</b>	International Organisation for Standardisation (ISO) International Electrotechnical Commission (IEC)	Pacific Area Standards Congress (PASC)	Standards New Zealand (SNZ)
<b>Physical standards of measurement</b>	International Bureau of Weights and Measures (BIPM)	Asia Pacific Metrology Programme (APMP)	Measurement Standards Laboratory (MSL)
<b>Legal measurement</b>	International Organisation of Legal Metrology (OIML)	Asia Pacific Legal Metrology Forum (APLMF)	Measurement and Product Safety Service (MAPSS)
<b>Accreditation of laboratories, inspection bodies and radiology services</b>	International Laboratory Accreditation Co-operation (ILAC)	Asia Pacific Laboratory Accreditation Co-operation (APLAC) European Co-operation for Accreditation (EA) Inter American Accreditation Cooperation (IAAC)	International Accreditation New Zealand (IANZ)
<b>Accreditation of certification bodies (products, systems and personnel)</b>	International Accreditation Forum (IAF); International Auditor and Training Certification Association (IATCA)	Pacific Accreditation Cooperation (PAC)	Joint Accreditation System for Australia and New Zealand (JAS-ANZ)
* These bodies are recognised as “Specialist Regional Bodies” in the context of the APEC Committee on Trade and Investment, Sub-Committee on Standards and Conformance (SCSC).		** These are governmental technical infrastructure bodies. Departmental liaison and coordination of technical infrastructure and conformance policy is the responsibility of the Business Policy Division, Ministry of Economic Development.	

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