





# AUSTRALIA'S STANDARDS AND CONFORMANCE INFRASTRUCTURE

An Essential Foundation

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#### STANDARDS LEVEL THE PLAYING FIELD

We are living in a world that is undergoing profound transformations at all levels. Economies have never been more interdependent. Today, products that are consumed in one market are no longer made in one country; they are made in the world. Before they get to the end-consumer, they transit through many countries where manpower or parts add value to the final product.

Small and medium enterprises that use International Standards will find it easier to get their products certified and are better able to compete and sell anywhere in the world. With International Standards SMEs are able to take part in global value chains and benefit from technology transfer.

Countries that have mainstreamed International Standards in their policies and regulations are able to better protect their populations and give them a bigger choice of quality products.

In a multi-polar world, where the influence and economic weight of emerging economies is shifting the balance of power, International Standards stimulate trade, overcome artificial trade barriers and help level the playing field. This makes companies, industries and economies more competitive, making it easier for them to export, and stimulates diversification nationally and internationally.

Based on the International Organization for Standardization (ISO) World Standards Day Message 14 October 2014

# STANDARDS AND CONFORMANCE INFRASTRUCTURE

Every country needs a sound standards and conformance infrastructure to achieve its societal and economic goals. Increasingly all nations need to fully engage in the global economy and leverage the benefits of international trade to enable continued income growth and the economic wellbeing of their people.

This is where metrology, standardisation and accreditation of conformity assessment activities come into play, forming essential components of an infrastructure that supports sustainable development and a nation's ability to fully participate in the global economy (see Box 1).

The practices of measurement, standardisation and conformity assessment impact on the simplest of activities such as the time your alarm clock rings and the way the seatbelts operate in your car.

The same infrastructure also underpins the complex technologies and industrial processes that drive economic growth. Everyday commercial transactions and international trade could not take place without the support of the standards and conformance infrastructure.

It provides the essential framework for industry and government to maintain domestic and foreign confidence in our goods and services. It is also crucial to enhancing our global competitiveness, attracting investment and encouraging and supporting innovation.



Each component of Australia's standards and conformance infrastructure has a key role to play in ensuring that a high level of quality and accuracy is delivered and is consistently accepted with confidence by the community, Australian businesses and our international trading partners.

The four standards and conformance organisations in Australia (see Box 1) have formally established a new body, the Technical Infrastructure Alliance (TIA), aimed at identifying and executing joint projects to enhance this aspect of the national infrastructure. The TIA will achieve better collaboration, efficiency and innovation between the four member organisations through greater sharing of resources, expertise, knowledge and ideas. It will also act as a single point of contact for external stakeholders. The resulting enhancement of the national infrastructure will contribute to greater economic prosperity for Australia and to the better health, safety and wellbeing of all Australians.

#### **Box 1: The standards and conformance system**

#### **Metrology (Measurement Science)**

Metrology standards and the traceability of measurement to those standards provide the basis for successful trade and commerce. They help drive the continuous development of science, technology and industrial production. They are the foundation for all testing and measurements, including those associated with disease diagnosis and health care, food safety, forensic science, environmental monitoring, work health and safety, optimisation of production and consumer confidence and protection.

The **National Measurement Institute** (a division of the Department of Industry, Innovation and Science) is responsible for measurement standards in Australia.

#### **Standards**

Standards, that is, written or documentary standards, include specifications and procedural requirements. Adherence to standards can be either to voluntary documents or to mandatory regulations and laws.

Documentary standards are written by international organisations, national standards bodies, regulatory authorities, and trade and industry associations. They are characterised by an open and transparent process with active participation of stakeholders including technical experts from industry, government, consumer groups and other affected parties in writing standards.

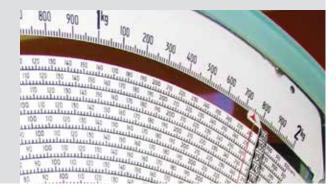
**Standards Australia** is recognised by the Australian Government as Australia's peak, non-government standards development body.

#### **Accreditation and Conformity Assessment**

Accreditation is a procedure by which an independent authoritative body (accreditation body) gives formal recognition that a conformity assessment organisation is competent to carry out specific tasks. Accreditation involves the onsite assessment of conformity assessment bodies for competence to carry out specified calibrations, tests, inspections and/or certifications of products, systems or personnel, to determine if they meet a (minimum) required standard.

Conformity assessment activities are critical to the fitness for purpose and reliability of the many products and services upon which all economies rely for, among other things, the health and safety of their citizens, and for trade. Thus, it is vitally important that they are undertaken competently and efficiently.

The National Association of Testing Authorities (NATA) and the Joint Accreditation System of Australia and New Zealand (JAS-ANZ) are Australia's accreditation bodies for testing laboratories, inspection bodies and certification bodies.



# International roles and obligations

The development and international harmonisation of standards and the mutual recognition of conformity assessment activities play a vital role in the economic growth and development of a small, open economy like Australia.

The global nature of trade and manufacturing makes it imperative that measurement standards are comparable across the world. Trading nations recognised this need as long ago as 1875 when the Convention of the Metre or Metre Treaty was established, to provide guidance and focus for developing an internationally consistent measurement system. Under the Metre Treaty many national laboratories compare their standards to ensure there is a consistent global basis

for measurement. Australia plays an active role in the key international metrological organisations (see Box 2).

With the ongoing removal of tariff barriers, emphasis by governments and by the World Trade Organization (WTO) on trade liberalisation has moved to consideration of nontariff barriers. Among the most significant of these are national and International Standards together with testing and certification requirements that are not harmonised internationally.

As a member of the WTO, Australia is committed to ensuring that mandatory standards and conformity assessment procedures are no more trade restrictive than necessary. These commitments are outlined in the Technical Barriers to Trade (TBT) Agreement.

The TBT Agreement states that signatories shall not implement mandatory standards (or technical regulations in TBT terminology) that are more trade restrictive than necessary to meet legitimate objectives which include:

- national security;
- human health or safety;
- animal or plant health or safety;
- · protection of the environment; and
- the prevention of deceptive practices.

It also requires signatories not to apply discriminatory conformity assessment practices to products imported from other WTO member countries.

The TBT agreement encourages members to participate in International Standard setting organisations and adopt the resulting standards, for the harmonisation of voluntary and regulatory standards worldwide (see Box 3). The adoption of International Standards benefits exporters by enabling the design and manufacture of products to one standard rather than a range of national standards. This supports Australian industry participation in the global supply chain. It also benefits consumers by increasing availability and reducing the cost of imported products consistent with an accepted International Standard.

The TBT agreement also encourages members to participate in the development of standards and guides for conformity assessment procedures and to recognise the results of overseas conformity assessment bodies (see Box 4). Eliminating the need for re-calibration, re-testing, re-inspection or re-certification in the importing country reduces transaction costs, breaks down technical barriers and increases the economic efficiency of international trade.

#### Box 2: Key international metrological organisations

The International Committee for Weights and Measures (CIPM) consists of 18 individuals each from a different member state under the Metre Convention. The CIPM's principal task is to promote worldwide uniformity in units of measurement

The International Bureau of Weights and Measures (BIPM) is mandated to provide the basis for a single, coherent system of measurements throughout the world, traceable to the International System of Units (SI). BIPM operates under the supervision of the CIPM.

#### The International Organization of Legal Metrology

(OIML) is an inter-governmental organisation created in 1955. The aim of the OIML is to coordinate and harmonise the administrative and technical regulations applying to measurements and measuring instruments passed by the different countries. The purpose is to facilitate trade between countries, not only for measuring instruments, but also for all operations involving measurements.

Sources: www.bipm.org/en/committees/cipm; www.bipm.org; www.oiml.org

#### **Box 3: International Standards development bodies**

The International Organization for Standardization (ISO) and the International Electrotechnical Commission (IEC) are generally acknowledged as the most important international standardisation bodies in terms of size and influence. Taken together, ISO and IEC produce around 85 per cent of all International Standards.

The ISO, established in 1947, is a network of national standards institutes from 161 countries and is the world's largest developer of internationally harmonised standards. It is a private non-governmental body whose members do not directly represent the governments of their countries of origin. The standards which it develops are voluntary in nature and tend to cover a broad range of subjects and markets (exceptions are standards in electrical and electronic engineering, the IEC's domain). ISO has a stock of over 19 500 International Standards.

The IEC was established in 1906 and produces International Standards for all electrical, electronic and related technologies. IEC provides a platform to companies, industries and governments for meeting, discussing and developing the International Standards they require. The organisation oversees the operation of 175 technical committees and subcommittees involved in setting standards. The IEC has a stock of over 6300 published standards and standards-type documents.

Sources: www.iso.org; www.iec.ch



#### Regional engagement

Australia plays a significant regional role, including participation in several bodies within the Asia-Pacific region. The main regional forum involving Australia is the Asia-Pacific Economic Cooperation Sub-Committee on Standards and Conformance (APEC SCSC).

The APEC SCSC performs several key activities including fostering an effective interface between regional and international fora, and linking with the five APEC Specialist Regional Bodies (SRBs) (see Box 5), which provide important links to the global standards and conformance infrastructure.

#### **Box 4: Key international accreditation bodies**

The International Laboratory Accreditation Cooperation (ILAC) is the principal international forum for laboratory accreditation bodies. The primary aim of ILAC is to facilitate trade by promoting the acceptance of test and calibration results from accredited facilities across national borders. ILAC, as well as regional laboratory accreditation cooperations such as the Asia Pacific Laboratory Accreditation Cooperation (APLAC), have been instrumental in the development of mutual recognition



agreements/arrangements (MRAs) between national accreditation bodies. Under these MRAs, each organisation recognises the equivalence of accreditations granted by its overseas counterparts and promotes this equivalence to government and industry.

The International Accreditation Forum (IAF) is the international association of accreditation bodies and other bodies interested in conformity assessment in the area of the certification of management systems, products, services, personnel and similar programs. Its primary function is to develop a single worldwide program of conformity assessment that reduces the risk for business and its customers by assuring them that certificates issued by Conformity Assessment Bodies (CABs) accredited by IAF Multilateral Recognition Arrangement (MLA) signatories are equally reliable. The Pacific Accreditation Cooperation (PAC) undertakes similar work at the regional level.

Sources: www.ilac.org; www.aplac.org/aplac\_mra.html; www.iaf.nu

#### **Box 5: APEC Specialist Regional Bodies**

The APEC SCSC has identified five regional bodies each operating in an area of standards and conformance.

These five bodies are described below.

The Asia Pacific Laboratory Accreditation Cooperation (APLAC) is a cooperation of accreditation bodies in the Asia-Pacific region that accredit testing and calibration laboratories, inspection bodies, proficiency testing scheme providers and reference material producers. APLAC's primary aim is to establish, develop and expand a Mutual Recognition Agreement (MRA) in the region to facilitate trade. APLAC is an ILAC-recognised region.

The Asia-Pacific Legal Metrology Forum (APLMF) is a grouping of legal metrology authorities in APEC economies and other economies on the Pacific Rim, whose objective is the development of legal metrology and the promotion of free and open trade in the region through the harmonisation and removal of technical or administrative barriers to trade in the field of legal metrology. APLMF members collaborate to promote the coordination and integrity of legal metrology activities and services in order to achieve greater harmony of measurement and testing within the Asia-Pacific Region and build mutual confidence in legal metrology activities and services among members.

The Asia Pacific Metrology Programme (APMP) is a grouping of national metrology institutes from the Asia-Pacific region engaged in improving regional metrological capability through the sharing of expertise and exchange of technical services among Member laboratories. APMP is also a Regional Metrology

Organization (RMO) recognised by the International Committee for Weights and Measures (CIPM) for the purpose of worldwide mutual recognition of measurement standards and of calibration and measurement certificates.

The Pacific Accreditation Cooperation (PAC) is an association of accreditation bodies and other interested parties that share the purpose of facilitating trade and commerce within the Asia-Pacific region. Its ultimate objective is the creation of a global system that grants international recognition of certification or registration of management systems, products, services, personnel and other programs of conformity assessment. To achieve this, PAC promotes the international acceptance of accreditations granted by its accreditation body members, based on the equivalence of their accreditation programmes. PAC operates within the framework of the IAF.

The Pacific Area Standards Congress (PASC) is an independent organisation of Pacific area national standards organisations. An important objective of PASC is to exchange information and views between national standards bodies and among organisations interested in standardisation and conformance. It initiates necessary actions to help ensure proper coordination of international standardisation activities to meet world needs and foster international trade and commerce.

Sources: www.apec-pac.org; www.aplac.org; www.aplmf.org; www.apmpweb.org; www.pascnet.org

# DEPARTMENT OF INDUSTRY, INNOVATION AND SCIENCE

# Australia's standards and conformance infrastructure

Consistent with Australia's obligations under the World Trade Organization Technical Barriers to Trade (WTO TBT) Agreement, Australia seeks to influence and adopt international practice where possible. This includes policies that promote the alignment with International Standards and mechanisms to facilitate the recognition of measurement standards and conformity assessment results.

Australia's standards and conformance infrastructure works within international and regional frameworks to ensure we are on the cutting edge of standards and conformance policy. The infrastructure makes trade between nations and within Australia safer and fairer and reduces the technical and often costly barriers to trade. Our infrastructure includes governmental, metrological, standards and conformance bodies that collaborate to provide a cohesive and effective approach to standards and conformance policy.

The Commonwealth Department of Industry, Innovation and Science is the Australian Government's lead organisation for standards and conformance policy issues.

Key Australian standards and conformance organisations that operate within this policy context are:

- The National Measurement Institute—NMI (a division of the Department of Industry, Innovation and Science);
- Standards Australia (a membership based, independent, not for profit standards development organisation);
- The National Association of Testing Authorities—NATA (a membership based, not for profit organisation); and
- The Joint Accreditation System of Australia and New Zealand—JAS-ANZ (a bi-national government owned accreditation body).



# Role in the technical infrastructure

The Department of Industry, Innovation and Science is committed to working with stakeholders and industry to deliver economic benefits to ensure our competitive future. The department seeks to facilitate international trade, improving market access for Australian industry by breaking down technical and regulatory barriers to trade. It also plays a significant role in promoting the adoption of International Standards and the recognition of conformity assessment results.

The department is also the home of the NMI, the body responsible for Australia's measurement standards and legal metrology.

#### Structure and governance

The Department of Industry, Innovation and Science consolidates the Australian Government's efforts to drive economic growth, productivity and competitiveness by bringing together industry, resources and science. The department is accountable to the Australian Parliament through the Minister for Industry, Innovation and Science.

#### **Operations**

The Department of Industry, Innovation and Science maintains policy oversight of Australia's technical infrastructure. This includes the administration of the Support for Industry Service Organisations (SISO) Programme and the government's Memoranda of Understanding (MoUs) with Standards Australia and NATA.

The MoUs provide Standards Australia and NATA with peak body recognition by the Australian Government.

The MoU also recognises Standards Australia and NATA as the Australian members of key International Standards and conformance bodies [e.g. International Organization for Standardization (ISO), International Electrotechnical Commission (IEC), International Laboratory Accreditation Cooperation (ILAC)]. The MoUs require these organisations to act in a way that is consistent with Australia's international obligations under the WTO TBT Agreement. In particular, standards should be based on International Standards (where appropriate), conformity assessment test results should be accepted internationally and mutual recognition should be pursued internationally.

The SISO programme is a long running initiative of the Australian Government. Its purpose is to ensure continuing Australian participation in and representation on, key International Standards and conformance bodies. The SISO programme delivers funding to Standards Australia and NATA to support this activity.

The department also plays a role in the governance of Standards Australia and JAS-ANZ via participation on the Standards Australia's Council, and the Board of JAS-ANZ.

#### International engagement

The Department of Industry, Innovation and Science participates in the drafting and negotiation of Technical Barriers to Trade chapters for bilateral and multilateral Free Trade Agreements (FTAs).

The Department of Industry, Innovation and Science is also responsible for the oversight and management of the Trans-Tasman, European Community (EC), European Free Trade Association (EFTA) and Singapore Mutual Recognition Arrangements/Agreements (MRAs). MRAs help to facilitate trade by reducing the need to duplicate product testing. This can reduce costs and improve 'time to market' for Australian exporters.

#### Regional cooperation

The Department of Industry, Innovation and Science represents Australia on the Asia-Pacific Economic Cooperation Sub-Committee on Standards and Conformance (APEC SCSC). The department works closely with Standards Australia, NATA, the Department of Foreign Affairs and Trade and other stakeholders to canvas Australia's policy positions on issues and projects raised in the SCSC.

APEC SCSC work has a cooperative focus and is entirely consensus based. The SCSC agenda aligns with the WTO TBT Agreement and aims to encourage and facilitate the following:

- the adoption of, or harmonisation with, International Standards (so that exporters only need to design products to one standard thus reducing development costs);
- the recognition of conformity assessment procedures (to reduce the cost of testing and compliance by not requiring re-testing in the importing country);
- the promotion of good regulatory practices (to help ensure that standards and conformance related regulations are developed in a trade friendly manner);
- greater transparency (to share information on the implementation of new and existing regulatory requirements and allow for meaningful consultation); and
- capacity building within the region (to help developing economies to meet their obligations under the WTO TBT Agreement and develop relevant institutions and capacity).

#### Box 6: Mutual Recognition Arrangements/ Agreements (MRAs)

The Department of Industry, Innovation and Science develops and manages government to government MRAs which provide for greater movement and ease of access of goods and services between nations. These MRAs have the potential to reduce the time and costs associated with exporting internationally.

#### The Trans-Tasman Mutual Recognition Arrangement

(TTMRA) is an arrangement between Australia and New Zealand. The core of the arrangement is that goods that are able to be legally sold in Australia are able to be sold in New Zealand and vice versa – regardless of differences in standards or other sale-related regulatory requirements between Australia and New Zealand.

The TTMRA provides a simple, low cost and low maintenance mechanism for overcoming unnecessary regulatory impediments to the trade in goods. Benefits flowing from the TTMRA include:

- lower costs to business and improved competitiveness from being able to manufacture to a single standard;
- · greater choice for consumers; and
- greater cooperation between regulatory authorities.

The **European Community MRA** (EC-MRA) facilitates trade between Australia and the European Union (EU) countries by recognising and accepting the technical competence of each other's conformity assessment bodies to test and certify products for compliance with the standards and regulatory requirements of the other party, largely decreasing the need for duplicative testing or re-certification when the goods are traded. For Australian exporters this means that compliance with the relevant EU regulations can be completed prior to export. In this way products can be placed on EU markets without further intervention by EU authorities, potentially saving time and money.

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www.industry.gov.au

#### **Useful Links**

#### Trade Policy, Standards and Conformance

www.industry.gov.au/industry/IndustryInitiatives/ TradePolicies

#### Mutual Recognition Arrangements/Agreements

www.industry.gov.au/industry/IndustryInitiatives/ TradePolicies/MutualRecognition

### Asia-Pacific Economic Cooperation Sub-Committee on Standards and Conformance (APEC SCSC)

www.apec.org/Home/Groups/Committee-on-Tradeand-Investment/Sub-Committee-on-Standards-and-Conformance

#### NATIONAL MEASUREMENT INSTITUTE

# Role in the technical infrastructure

The National Measurement Institute (NMI) is responsible for the administration of the National Measurement Act and for advising the Australian Government on measurement issues.

NMI realises, develops, maintains and disseminates Australia's peak measurement standards for physical, chemical and biological measurement, conducts world class research into new measurement techniques, and is responsible for Australia's legal metrology framework. It also regulates the use of measuring instruments, such as petrol bowsers and supermarket scales, in domestic trade in Australia.

NMI ensures Australia's measurement standards are at a level comparable to those of its major trading partners, and that industry, commerce, government authorities and the general community can have confidence in transactions based on measurement

NMI supports the other elements of the standards and conformance infrastructure by contributing measurement expertise in relevant activities. For example, NMI experts work with the National Association of Testing Authorities (NATA) in accreditation of laboratories and proficiency testing. NMI experts are also members of Australia's delegations to the International Standards setting committees of the International Organization for Standardization (ISO), the International Electrotechnical Commission (IEC), and the International Telecommunications Union (ITU), on behalf of Standards Australia.

#### Structure and governance

NMI is a division of the Department of Industry, Innovation and Science and is accountable to the Minister for Industry, Innovation and Science and, through the Minister, to the Australian Parliament. NMI's Chief Metrologist has functions conferred under the *National Measurement Act 1960* and subordinate regulations.

NMI was established on 1 July 2004 by bringing together three agencies into one organisation responsible for the Australian Government's peak metrology functions. On 1 July 2010, NMI became responsible for the national trade measurement system when the Commonwealth assumed responsibility for trade weights and measures from the States and Territories.



NMI has staff working across Australia, including research and analytical laboratories in Sydney, Melbourne and Perth, and trade measurement centres in every capital city other than Canberra.

#### **Operations**

NMI undertakes scientific research to keep Australia's measurement standards in step with the ever-increasing technological demand for accurate measurements. NMI also develops reference materials to meet the needs of regulators and industry for analysis and testing in chemistry and biology.

NMI provides calibration and consultancy services for Australian industry, trade, defence and commerce, and provides measurement standards in support of environmental protection, health and safety.

It also provides pattern approval for measuring instruments. These include all types of weighing equipment and liquor, petrol, liquid petroleum gas and compressed natural gas dispensers.

NMI constantly aims to improve client satisfaction and productivity by monitoring key performance indicators including revenue, costs, and turn-around times. NMI also plays an active role in the development of measurement skills in industry, government and the community by offering training courses, collaborative research projects, and supervising under- and post-graduate students.

#### International engagement

In the area of metrology, Australia is a signatory to the two inter-governmental treaties in measurement, the Convention of the Metre and the Convention of the International Organization for Legal Metrology (OIML).

NMI fulfils Australia's responsibilities under both of these treaties, providing expert representation in the peak scientific committees and activities of the International Committee for Weights and Measures (CIPM) established under the Metre Convention and the technical committees in legal metrology established under the OIML.

The participation of NMI experts in these peak global forums is important to maintaining the currency of NMI's expertise (including through international research collaboration), to ensure that Australia keeps abreast of international trends and drivers and to voice Australian interests and issues at these levels.

NMI is Australia's signatory to the international mutual recognition arrangements (MRA) established under both the Metre Treaty and the OIML Convention. These are the CIPM MRA and the OIML Mutual Acceptance Arrangement (MAA).

Under the CIPM MRA, signatories participate in a range of international measurement comparisons to demonstrate their capabilities. Signatories also submit their calibration and measurement capabilities for rigorous international peer review before publication in the international database that forms the technical basis of the CIPM MRA. NMI's participation in these activities ensures international credibility for Australia's measurement system and underpins testing and certification of traded products and services.

NMI is also an active participant in activities of the OIML, including development of model regulations for pattern approval of measuring instruments used for trade or regulatory purposes. OIML has established an international certification scheme as well as the OIML MAA for the international acceptance of test reports.

#### Regional cooperation

In the Asia-Pacific region, NMI is Australia's official representative to the two key regional metrology bodies, the Asia-Pacific Metrology Programme (APMP) and the Asia Pacific Legal Metrology Forum (APLMF). These two bodies respectively coordinate the activities of regional national metrology institutes and legal metrology authorities.

#### **Box 7: NMI activities**



NMI participates at the governance level in both the APMP (currently chairing this forum) and APLMF.

#### **NMI's Time Service**

An Australian example of the application of measurement expertise relates to the accurate use of time by government and service industries such as major communications organisations, banking and transport systems. NMI is continually developing and improving systems for disseminating high accuracy time, traceable to national and International Standards, onto the information technology (IT) networks of government and private organisations across Australia. Accurate timing underpins confidence in the integrity of financial transactions, correct operation of IT networks and security of IT infrastructure and data.

#### **Genetic Testing**

NMI's bioanalysis team develops techniques to test for the presence of specific genetic material. Such techniques are highly relevant to the measurement of allergens in food, detecting the presence and concentration of genetically-modified food components, and the testing of athletes for the use of such banned practices as blood doping. The same techniques form the basis for the rapidly emerging medical diagnostic and therapeutic methods based on genetic manipulation and screening.

#### **Illicit Drug Profiling**

NMI has used its inventory of pure-substance chemical standards in the development of innovative software for the Australian Federal Police (AFP) that permits that body to identify the geographic source of illicit drug material seized while entering Australia. The capability has now been refined to such an extent that the AFP can even identify the particular valley in South America in which a seized sample originated. Such intelligence has proved invaluable for police operations aimed at disrupting drug trafficking.

**Image:** Coordinate Measuring Machine. Courtesy of NMI. The Coordinate Measuring Machine measures the physical dimensions of an engine block to high accuracy.

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www.measurement.gov.au

#### **Useful Links**

International Committee on Weights and Measures (CIPM)

www.bipm.org/en/committees/cipm

International Bureau of Weights and Measures (BIPM)

www.bipm.org

International Organization of Legal Metrology (OIML)

www.oiml.org

Asia-Pacific Legal Metrology Forum

www.aplmf.org

Asia Pacific Metrology Programme

www.apmpweb.org

#### STANDARDS AUSTRALIA

# Role in the technical infrastructure

Standards Australia was established in 1922 and is the nation's peak standards organisation. It is charged by the Australian Government to meet Australia's need for contemporary, internationally aligned standards and related services. The work of Standards Australia enhances the nation's economic efficiency and international competitiveness and contributes to community demand for a safe and sustainable environment.

Standards Australia's processes are open, transparent and consensus based. This unbiased standards development process ensures that all competing interests are heard, their points of view considered and consensus reached. Standards Australia works with international and Specialist Regional Bodies and government on issues of conformance and assessment. Standards Australia's roles are recognised in its Memorandum of Understanding with the Australian Government.

#### Structure and governance

Standards Australia is a public company limited by guarantee. More than 70 of Australia's leading industry, government and consumer organisations form the Members of the Standards Australia Council. The Council has the responsibility to elect the Board of Directors and the Chairman, The Standards Development and Accreditation Committee (SDAC) and to appoint new members to the organisation. The Standards Australia Council is responsible for the general oversight of standards development in Australia and the governance of Standards Australia.

#### **Operations**

Standards Australia facilitates and manages the development, adoption and maintenance of Australian Standards and other related solutions including Handbooks, Guides, Technical Specifications and Technical Reports.

Standards Australia does this by providing a neutral environment and rigorous framework in which government, industry, consumer, academic, professional, community and employee bodies can discuss and debate issues with the aim of developing standards solutions in a quick and efficient way.



The processes of Standards Australia are based on a balance of interest, transparency, openness and consensus. Standards Australia looks to adopt International Standards to the maximum extent possible. Only in the absence of an appropriate existing International Standard, and after an assessment that the proposed Standard will not be anti-competitive, will a Committee proceed to prepare a draft for a new Australian Standard. The draft document is then made available for public comment.

Standards Australia is also responsible for ensuring Australia's viewpoint is heard and considered in the development of International Standards and their subsequent adoption as Australian Standards.

Standards Australia is not part of government or a regulator and is not responsible for enforcing compliance or certification with Australian Standards.

Standards Australia supports the accreditation of other Standards Development Organisations through the SDAC. The SDAC's role is to 'encourage and accredit organisations to develop Australian Standards of credibility and integrity for the net benefit of the Australian community'.

Standards Australia works with industry, government and consumer interests in Australia and internationally on a range of areas from cloud computing to forensics, consumer safety to building and construction, manufacturing to quality management systems where necessary, appropriate and in the national interest.

#### International engagement

Standards Australia has international influence as the Australian Member of the world's most important standards organisations, the International Organization for Standardization (ISO) and the International Electrotechnical Commission (IEC).

These organisations develop International Standards on which world markets and international conventions are based. They make trade between countries easier and fairer and are a safeguard for users and consumers, resulting in many aspects of our lives being made much simpler.

#### Regional cooperation

As part of the Closer Economic Relations agreement, Standards Australia maintains strong links with Standards New Zealand. Both are party to a formal agreement for preparing and publishing joint Australian/New Zealand Standards where appropriate. Standards Australia is a founding and leading member of the Pacific Area Standards Congress (PASC), and also cooperates closely with the government in the standards and conformance activities of Asia-Pacific Economic Cooperation (APEC) and Association of South East Asian Nations - Australia New Zealand Free Trade Agreement (AANZFTA). Standards Australia actively participates in the Specialist Regional Bodies Forum and works closely with government on trade related matters.

#### **Box 8: Safety of electrical appliances**



The product electrical safety standards prepared by International Electrotechnical Commission (IEC) TC 61 (IEC 60335 series) are extensively used by regulators worldwide as the safety criteria for electrical goods sold to consumers—a significant element of the global economy, and a major area of public safety.

These IEC standards, applied in Australia and New Zealand as AS/NZS 3350 and AS/NZS 60335, form the technical basis of electrical product safety regulation, and hence comply with Australian WTO obligations in this area. Australia (and NZ) has had substantial success in IEC TC 61 via submission and representation. This makes national adoption much easier (eg. acceptable fire tests for electrical appliances, and the acceptance by IEC TC 61 of the Australian standard for steaming appliances).

Australian participation is essential to maintaining the high confidence level in IEC as the AS/NZS 3350 and AS/NZS 60335 series of standards are widely used by regulators in Australia.

#### **Contact details**

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www.standards.org.au

#### **Useful Links**

International Organization for Standardization

International Electrotechnical Commission (IEC) www.iec.ch

Pacific Area Standards Congress (PASC)

www.pascnet.org

# Do all products have to meet Australian Standards?

In Australia, standards can either be voluntary or mandatory. Compliance with Australian Standards (i.e. voluntary standards) is only legally required if they are referenced in regulation, legislation or in a contract.

#### Voluntary standards

Many organisations choose to comply with voluntary standards. Voluntary standards are published documents setting out specifications and procedures designed to ensure products, services and systems are safe, reliable and consistently perform as intended. Voluntary standards establish a common language which defines quality and safety criteria. They facilitate trade and market exchange, and give more certainty to buyers and sellers trading products, helping to limit ambiguity over buyer requirements and product specifications.

Standards Australia has a catalogue of approximately 7000 Australian Standards, one third of which are referenced in Australian, State or Territory regulation. These cover everything from consumer products and services, construction, engineering, business, information technology, human services, energy and water utilities, to the environment.

#### **Mandatory standards**

Mandatory standards, for example, mandatory safety standards are made for products that are likely to be especially hazardous. In making mandatory safety standards, the government protects consumers by specifying minimum requirements that products must meet before they can be supplied. Safety standards require goods to comply with particular performance, composition, contents, methods of manufacture or processing, design, construction, finish or packaging rules.

In some cases, voluntary standards are used as a 'Deemed to Satisfy' solution of the law. The National Construction Code, as an example, references voluntary Australian Standards as a means of demonstrating compliance with the National Construction Code. The standards are by virtue of this reference, in law, and must be complied with if they are used as a means of demonstrating compliance. This type of regulatory structure allows for choice in complying with an Australian Standard, or using another method to demonstrate compliance. Examples of mandatory Australian Standards include electrical safety (see www.erac.gov.au), consumer product safety standards (see www.productsafety.gov.au) and building and plumbing standards (see www.abcb.gov.au).



#### **Compliance with Australian Standards**

Where organisations make a claim of compliance with Australian Standards this must be substantiated. If an organisation falsely represents that its goods or services meet a certain standard this is likely to raise concerns under the misleading or deceptive conduct and misrepresentation provisions in the Australian Consumer Law. Where a claim is false or misleading consumers may make a complaint to the Australian Competition and Consumer Commission (ACCC) under the Australian Consumer Law (see <a href="https://www.accc.gov.au/consumers/consumer-rights-guarantees">www.accc.gov.au/consumers/consumer-rights-guarantees</a>) or State or Territory Fair Trading Offices.

Problems with products not meeting Australian Standards, as stipulated in a contract, for example, are usually a matter for the parties to the contract who have a general recourse to legal action.

Compliance with Australian Standards should not be confused with consumer guarantees that apply to all goods and services sold in Australia from 1 January 2011 under the Australian Consumer Law. Consumer guarantees include:

- goods will be of acceptable quality;
- goods will be fit for any disclosed purpose;
- goods will match their description;
- goods will match the sample or demonstration model;
- any express warranties will be honoured;
- spare parts and repair facilities will be available for a reasonable time; and
- services must be provided with care and skill, be fit for any disclosed purpose and achieve any disclosed result.

For more information about the Australian Consumer Law see www.accc.gov.au/consumers/consumer-rights-quarantees

Image: JSF tooling. Courtesy of Marand Precision Engineering Pty Limited.

#### NATIONAL ASSOCIATION OF TESTING AUTHORITIES

# Role in the technical infrastructure

The National Association of Testing Authorities (NATA) is recognised by the Commonwealth as Australia's key organisation for the development of knowledge, international experience and recognition in accreditation of inspection bodies, testing and measurement laboratories, proficiency testing scheme providers and producers of reference materials.

The Australian Government recognises NATA's authority in the accreditation of laboratories, inspection bodies, and related services through a Memorandum of Understanding. NATA is also recognised as the national compliance monitoring authority for facilities performing activities in accordance with the OECD Principle of Good Laboratory Practice.

NATA's accreditation activities interface with the broader technical infrastructure. Many NATA accreditations utilise standards prepared by Standards Australia as the basis for testing, measurement and inspection activities. NATA's accreditation of calibration facilities supports the role of NMI in facilitating the disseminations of Australia's measurement standards. NATA's laboratory accreditation activities also provide confidence in the testing and measurement data used in various certification systems accredited by JAS-ANZ.

#### Structure and governance

NATA was established in 1947 by the Australian Government with support from the 'States as the first comprehensive laboratory accreditation system in the world. It is an independent, not-for-profit company, operating as an association owned by its members.

NATA is governed by a Board drawn from accredited facilities and government, industry and professional body stakeholders.

NATA's accreditation activities are supported by technical advisory committees. Members of these committees have current and relevant scientific, engineering or technical knowledge of specific activities for which NATA offers accreditation and are drawn from accredited facilities, professional bodies, academic institutions, regulators and other stakeholders.



A secretariat with its head office in Sydney and offices in Melbourne, Brisbane, Adelaide and Perth administers the operations of the accreditation and related activities and includes some one hundred lead assessors (client coordinators) who undertake on-site peer-assessment activities in cooperation with voluntary technical assessors and experts.

NATA itself undergoes regular on-site evaluations by its international peers to ensure its ongoing competence and capability to deliver credible accreditation consistent with international practices.

#### Operations

NATA accreditation is a process of giving formal recognition that a body is competent to carry out specific tasks. The core of NATA accreditation is the third party, objective, peer assessment process at a scientific and technical level that provides assurance of the facility's capability to produce reliable data on which sound decisions can be made. NATA has access to nearly 3000 technical experts who volunteer their time to accompany NATA's scientific staff to evaluate the technical competence of applicant and accredited facilities.

NATA accreditation covers a comprehensive range of industry groups and professions and, where needed, can be tailored to suit specific regulatory or stakeholder needs.

### Box 9: How to determine what is accredited?

A NATA accreditation may not cover everything that a service provider might do so it is important to ask the right question when seeking an accredited facility.

Do not just ask "do you hold NATA accreditation?"

The better question is "do you hold NATA accreditation for [the specified activity]?"

NATA accredited facilities are able to add the NATA endorsement to reports covering accredited activities so a more concise specification is to simply ask that the results of the required activities are provided on NATA endorsed reports.

The activities for which a facility has successfully demonstrated practical competence and capability at a NATA assessment are detailed in a Scope of Accreditation.

Scopes are publicly available documents so they are the primary source of information for anyone seeking a specific service. They are accessible from the NATA website at www.nata.com.au.

Currently, NATA's key areas of operations are:

#### Laboratory accreditation

Laboratory accreditation can cover a broad range of calibration, measurement and testing activities whether they are undertaken in a formal laboratory, a mobile facility or *in situ*. The "laboratory" may be a stand-alone organisation or part of a larger organisation. The International Standard ISO/IEC 17025 is used as the primary accreditation criteria for most types of laboratory but there are two other categories of laboratory accreditation offered.

Medical Testing accreditation uses ISO 15189 as the primary accreditation criteria and covers testing of samples of human origin generally used for diagnostic purposes. Testing is most commonly laboratory based but accreditation also covers "point-of-care" testing and mobile testing facilities.

R&D laboratory accreditation is currently an ISO/IEC 17025 based program (the same standard as for routine testing facilities) but with the standard being interpreted specifically for the research environment. The program has a focus on technical competency and robust research management – both essential elements in the conduct of solid accountable research and is suited to all research environments that have a testing basis.



#### Inspection body accreditation

Inspection involves "examination of a product, process, service, or installation or their design and determination of its conformity with specific requirements or, on the basis of professional judgement, general requirements" (ISO/IEC 17020:2012). Essentially the process is conformity evaluation by observation and judgement accompanied as appropriate by measurement or testing. It can be applied to a vast range of activities across almost any sector.

#### Medical imaging accreditation

The Medical Imaging program includes procedures covering the modalities of general radiography, ultrasound, mammography, computerised tomography, interventional radiology, magnetic resonance imaging, nuclear medicine and bone mineral densitometry. The standards used are those produced by the Royal Australian and New Zealand College of Radiologists (RANZCR).

#### Sleep disorders services accreditation

The Sleeps Disorders Services program covers the diagnostic procedures and treatments by facilities offering various sleep studies, including sleep apnoea, sleep phase disorders, narcolepsy and insomnia. It is run in conjunction with the Australasian Sleep Association (ASA). The requirements for the competence of services offering Sleep Disorders Services are described in the ASA Standard for Sleep Disorders Services.

#### Reference material producers accreditation

Certified reference materials (CRMs) and reference materials (RMs) are widely used in the calibration of equipment, validation of measurement procedures and for quality control. NATA conducts assessments of Reference Material Producers (RMP) for compliance with the requirements of ISO Guides 34, 31 and 35 together with the applicable requirements of ISO/IEC 17025.

### Proficiency testing scheme provider accreditation

Proficiency testing is a tool for laboratories to compare their performance to that of similar laboratories and assist with education and training of a laboratory's staff. The primary accreditation criteria are ISO/IEC 17043 and cover the provider's competence to design, conduct and report on PT programs.

### OECD Principles of Good Laboratory Practice (GLP)

The OECD Principles of GLP apply to the conduct of nonclinical health and environmental safety studies and are required by national regulations for the purpose of registering or licensing pharmaceuticals, pesticides, veterinary drug products, industrial chemicals and similar products.

In Australia, NATA fills the role as the compliance monitoring authority. GLP is not an accreditation program but, being laboratory oriented, it is consistent with NATA's broader laboratory related services.

**Other Areas of Accreditation:** NATA is an approved accreditor for the National Safety and Quality Health Service Standards.

#### Training and seminar services:

NATA offers public and tailored in-house training programs in Australia and internationally.

### Public database of NATA accredited laboratories:

NATA maintains a database of its accredited facilities, including their scopes of accreditation. This is particularly useful for organisations seeking laboratories able to undertake specific tests, measurements or inspections.

#### **NATA** publications:

NATA publishes a range of technical and information documents which include:

- Accreditation Criteria;
- Policy Circulars addressing technical themes;
- Technical Notes addressing specific technical issues;
- Information Papers explaining accreditation positions;
- Industry User Guides to assist users of accredited services.

### **Box 10: Sleep Disorders Services accreditation**



The Thoracic Society of Australia and New Zealand (TSANZ) and the Australasian Sleep Association (ASA) established an accreditation process in 1997 to foster excellence in the approach to management of sleep disorders.

The Australasian Sleep Association took over governance of this process in July 2009. The Clinical Committee of the ASA was appointed to oversee the process through an ASA Accreditation Subcommittee. A standard (ASA Accreditation of Sleep Disorders Services) was developed, influenced by programmes established by the Australian Council of Healthcare Standards (ACHS) and the American Academy of Sleep Medicine (AASM).

To afford independent recognition to services satisfying the standards and to facilitate administration of the program, the ASA signed a Memorandum of Understanding (MoU) with NATA in 2011.

In 2012, with guidance from NATA, the ASA Standards were amended to include the principles from the International Standard ISO 15189 Medical laboratories—Particular requirements for quality and competence and were renamed ASA Standard for Sleep Disorders Services. The inclusion of the ISO requirements to the existing ASA standards brings sleep disorders services accreditation to an internationally recognised level. The ASA Standard for Sleep Disorders Services (ASA Standard) is the technical and managerial standard against which sleep disorders services are accredited using NATA's peer assessment processes.

The Sleep Disorders Services Accreditation Program, run jointly between NATA and the ASA, underpins the quality of sleep disorders services in this rapidly growing field of clinical services.

#### International engagement

NATA has been actively engaged in a broad range of accreditation related activities internationally. A particular focus of this participation has been on activities that contribute to reducing technical barriers to trade.

NATA was active through the 1980s in developing bilateral Mutual Recognition Arrangements (MRA) with other national accreditation bodies. In the 1990s, NATA's attention moved to building the Asia Pacific Laboratory Accreditation Cooperation (APLAC) and the International Laboratory Accreditation Cooperation (ILAC) with the intent of developing accreditation capacity regionally and globally that would lead to multi-lateral Mutual Recognition Arrangements. Indeed, NATA was the inaugural Chair of both fora and among the first group of accreditation bodies to sign the APLAC MRA (in November 1997) and the ILAC MRA (in November 2000).

NATA continues to represent Australia in ILAC and APLAC, actively participating in its committees and currently holding the secretariats for both organisations.

The work in ILAC and APLAC combined with NATA's signatory status to the MRAs and the standing of the other infrastructure bodies provides Australia with a sound position with respect to technical barriers when negotiating Free Trade Agreements.

NATA has a long history in providing capacity building and consultancy services for developing laboratory accreditation bodies around the globe and can train staff, both in country and through attachment in Australia.

In addition to these accreditation specific activities, NATA is also active in international activities recognised by the Commonwealth as being in the National Interest and which impact on NATA's activities. These include participation in:

- relevant ISO/Committee on Conformity Assessment (ISO/CASCO) work on development and maintenance of the ISO/IEC 17000 series of standards that related to accreditation and conformity assessment;
- OECD Working Group on Good Laboratory Practice; and
- Codex Alimentarius, which develops harmonised international food standards, guidelines and codes of practice to protect the health of the consumers.



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#### **Useful Links**

International Laboratory Accreditation Cooperation (ILAC) www.ilac.org

Asia-Pacific Laboratory Accreditation Cooperation (APLAC) www.aplac.org

# JOINT ACCREDITATION SYSTEM OF AUSTRALIA AND NEW ZEALAND

### Role in the technical infrastructure

The Joint Accreditation System of Australia and New Zealand (JAS-ANZ) was established by Treaty in 1991 by the Australian and New Zealand governments to strengthen the trading relationship between the two countries and with other countries

The JAS-ANZ Treaty established the Governing Board, Technical Advisory Council and Accreditation Review Board. The Treaty requires JAS-ANZ to operate a joint accreditation system and to deliver on four goals relating to Integrity and Confidence, Trade Support, Linkages, and International Acceptance, which are outlined below.

Accreditation of conformity assessment bodies enhances their status and authority both nationally and internationally and strengthens the international competitiveness of Australian and New Zealand industry.

Accreditation is a measure of the competence and impartiality of Certification and Inspection Bodies. It enables users to have confidence in certificates of conformance and reports that they issue.

#### Structure and governance

JAS-ANZ takes its direction from four goals that reflect the intention of JAS-ANZ's principal stakeholders in establishing the organisation. They remain the foundation for the direction of the organisation.

**Integrity and Confidence:** To maintain a joint accreditation system that will give users confidence that goods and services certified by accredited bodies meet established standards. Confidence is one of the enabling values of accreditation.

**Trade Support:** To obtain and maintain acceptance by Australia's and New Zealand's trading partners of domestic management systems and exported goods and services. Well-structured conformity assessment mechanisms support the flow of goods and services.



**Linkages:** To link with relevant bodies which establish or recognise standards for goods and services or which provide conformity assessment. Linkages provide the channels for JAS-ANZ to maintain a world class system of accreditation. Through these linkages, JAS-ANZ can influence outcomes in international and national standards and guidance on conformity assessment so that Australian and New Zealand interests are not disadvantaged.

International Acceptance: To obtain mutual recognition and acceptance of conformity assessment with relevant bodies in other countries. Mutual Recognition Arrangements/ Agreements (MRAs) and Multilateral Recognition Arrangements (MLAs) deliver a systematic framework for acceptance of conformity assessment results between trading nations.

JAS-ANZ operates on a not-for-profit basis. Under the formal direction of a Governing Board, the Technical Advisory Council and Accreditation Review Board support the development and implementation of policies and principles that underpin the operation of the joint accreditation system. The Technical Advisory Council represents stakeholder interests and the Accreditation Review Board provides expert and impartial decisions in relation to granting, maintaining, reducing, extending, suspending and withdrawing accreditation. JAS-ANZ has formal obligations to account for its activities to the Australian and New Zealand governments through forward planning and reporting against those plans. Through a network of international ties JAS-ANZ is subject to periodic peer review.

JAS-ANZ has a secretariat of 23 to assist the Governing Board fulfil its obligations.

#### **Operations**

JAS-ANZ activities are structured around five distinct disciplines or programs: management systems certification, product certification, personnel certification, inspection, and greenhouse gas validation and verification.

Under these five programs, JAS-ANZ recognises over 130 public and proprietary schemes that have been developed by or in conjunction with public authorities and industry groups. The schemes provide a level of confidence to support exchange of products and services across a wide range of industry sectors.

Over 120 certification and inspection bodies are accredited, with the largest number concentrated in management systems. Over 115,000 accredited certificates are issued in over 100 countries to address the need for authoritative attestations of conformity.

A high proportion of JAS-ANZ's effort centres on five areas of economic and social activity:

- Business Processes and Innovation;
- · Health and Human Services;
- · Food and Biological Systems;
- · Product Performance and Safety; and
- Environmental Management.

JAS-ANZ's operations also extend to providing technical support for the development of infrastructure capabilities in peer organisations.

### JAS-ANZ supporting Safety and Quality in Health Care and Disability Services

One of the most significant improvements arising from the national health reform agenda commenced when Australian Health Ministers agreed that the Australian Commission on Safety and Quality in Health Care (the Commission) will develop, monitor and implement national standards for improving clinical safety and quality in hospitals and health care settings to improve patient outcomes.

www.coag.gov.au/node/299 (item 36)

The Commission's National Safety and Quality Health Service Standards (NSQHSS) were subsequently endorsed by Australian Health Ministers to take effect on 1 January 2013 with full implementation by 1 January 2014.

The JAS-ANZ NSQHSS Scheme was developed by the JAS-ANZ Healthcare Technical Committee to ensure that JAS-ANZ accredited certification bodies provided appropriate transitional support when conducting independent audit and certification of health services to the NSQHSS.

The Commission's work provides a great example on how the new National Standards for Disability Services (NSDS) could be implemented. JAS-ANZ has worked with a number of the jurisdictions to harmonise the regulatory approaches taken for the independent auditing and certification of disability and other community services. This work has resulted in a family of jurisdictionally specific schemes that share common elements where agreed to by the jurisdictions.

www.dss.gov.au/disability-and-carers/standards-and-quality-assurance

#### Box 11: What is ISO 9000 family of standards?



The ISO 9000 family of international quality management standards and guidelines (ISO 10000 series and ISO 19011) has earned a global reputation as a basis for establishing effective and efficient quality management systems. ISO 9000 family, developed and published by the International Organization for Standardization (ISO), defines, establishes, and maintains a quality assurance system for manufacturing and service industries. The standards are available through national standards bodies.

ISO 9000 *Quality management systems—Fundamentals and vocabulary* standard provides the fundamentals and vocabulary used in the entire ISO 9000 family of standards. It sets the stage for understanding the basic elements of quality management as described in the ISO standards. ISO 9000 introduces users to the eight Quality Management Principles as well as the use of the process approach to achieve continual improvement.

ISO 9001 *Quality Management Systems—Requirements* is used when organizations are seeking to establish a quality management system that provides confidence in organization's ability to provide products that fulfil customer needs and expectations. It is the standard in the ISO 9000 family against which requirements of quality management systems can be certified by an external body.

The standard recognizes that the term "product" applies to services, processed material, hardware and software intended for external customers.

ISO 9004 Managing for the sustained success of an organization—A quality management approach gives guidance on a wider range of objectives of a quality management system than does ISO 9001, particularly in managing for the long-term success of an organisation. ISO 9004 is recommended as a guide for organisations whose top management wishes to extend the benefits of ISO 9001 in pursuit of systematic and continual improvement of the organisation's overall performance. However, it is not intended for certification or contractual purposes.

The ISO 9001 standard does not attempt to measure the quality of the products or services of companies; they make no reference to specific objectives or results. That is the role of business strategy. What the standards do is to provide a platform on which the pursuit of business objectives or results can be systematised and a method by which to formalise company tasks so as to produce products, or services that meet customer demands.

The ISO 9001 standard is generalized and abstract; its parts must be carefully interpreted to make sense within a particular organization. Over time, various industry sectors have standardised their interpretations of the guidelines within their own marketplace; AS9000 for aerospace, ISO/TS 16949 for automotive, TL 9000 for Telecom etc.

Like all ISO standards, ISO 9000 family is reviewed every five years to establish if a revision is required to keep it current and relevant for the marketplace. The future ISO 9001:2015 will respond to the latest trends and be compatible with other management systems such as ISO 14001. The new version will follow a new, high level structure to make it easier to use in conjunction with other management system standards, with increased importance given to risk.

#### International engagement

A key role for JAS-ANZ is establishing international arrangements with other countries to accept one another's certificates and inspection reports, so removing a technical barrier to trade.

JAS-ANZ supports overcoming technical barriers to trade by ensuring its accreditation programs and schemes keep pace with modern conformity assessment trends. An important mechanism for this is membership in international organisations which provide the framework of Multi-Lateral Recognition Arrangements (MLAs) and Mutual Recognition Arrangements (MRAs) under which signatories will recognise one another's accredited certificates and inspection reports.

JAS-ANZ is an active member of the key accreditation organisations including the International Accreditation Forum (IAF), the International Laboratory Accreditation Cooperation (ILAC), the Pacific Accreditation Cooperation (PAC), and the Asia Pacific Laboratory Accreditation Cooperation (APLAC).

JAS-ANZ is a founding member of the IAF and PAC, and a signatory to the IAF and PAC MLAs for quality management systems, environmental management systems, food safety management systems and product certification.

JAS-ANZ is a signatory to the ILAC and APLAC MRAs for Inspection.

JAS-ANZ is also a member of the Multilateral Cooperative Accreditation Arrangement (MCAA), a collaborative arrangement between a number of international accreditation bodies that facilitates the sharing of information relating to signatory accredited bodies and cooperation in the servicing of these bodies.

The benefit of this work is that it reduces the potential for re-certification or re-inspection when products and services move from one country to another.

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#### **Useful links**

International Accreditation Forum (IAF)

www.iaf.nu

Pacific Accreditation Cooperation (PAC)

www.apec-pac.org

#### **ABBREVIATIONS**

**AASM** - American Academy of Sleep Medicine

**ABSDO** – Accreditation Board for Standards Development Organisations

**ACCC** - Australian Competition and Consumer Commission

**ACHS** - Australian Council of Healthcare Standards

AFP - Australian Federal Police

**APEC** – Asia-Pacific Economic Cooperation

**APEC SCSC** – APEC Sub-Committee on Standards and Conformance

**APLAC** – Asia Pacific Laboratory Accreditation Cooperation

**APLMF** – Asia-Pacific Legal Metrology Forum

**APMP** - Asia Pacific Metrology Programme

AS/NZS - Australian Standard / New Zealand Standard

**ASA** - Australasian Sleep Association

**ASEAN** - Association of Southeast Asian Nations

**AANZFTA** - Association of Southeast Asian Nations Australia New Zealand Free Trade Agreement

**BIPM** - International Bureau of Weights and Measures

**CAB** - Conformity Assessment Body

**CIPM** - International Committee for Weights and Measures

**CRM** - Certified Reference Materials

**EC** - European Community

**EC MRA** - Agreement on Mutual Recognition in relation to Conformity Assessment, Certificates and Markings between Australia and the European Community

**EFTA** - European Free Trade Association

**EU** - European Union

FTA - Free Trade Agreement

IAF - International Accreditation Forum

IEC - International Electrotechnical Commission

**ILAC** – International Laboratory Accreditation Cooperation

**ISO** - International Organization for Standardization

**ISO-CASCO** – International Organization for Standardization-Committee on Conformity Assessment

IT - Information Technology

ITU - International Telecommunications Union

**JAS-ANZ** – Joint Accreditation System of Australia and New Zealand

MAA - Mutual Acceptance Arrangement

MCAA - Multilateral Cooperative Accreditation Arrangement

**MLA** - Multilateral Recognition Arrangement

**MoU** - Memorandum of Understanding

MRA - Mutual Recognition Arrangement/Agreement

**NATA** - National Association of Testing Authorities

NMI - National Measurement Institute

**NSDS** - National Standards for Disability Services

**NSQHSS** - National Safety and Quality Health Service Standards

**OECD** - Organisation for Economic Co-operation and Development

**OIML** - International Organization of Legal Metrology

PAC - Pacific Accreditation Cooperation

**PASC** - Pacific Area Standards Congress

**PT** - Proficiency Testing

**RM** - Reference Materials

**RMP** – Reference Material Producers

**RMO** - Regional Metrology Organization

SI - International System of Units

**SISO** - Support for Industry Service Organisations

**SRB** - Specialist Regional Bodies

TIA - Technical Infrastructure Alliance

**TBT** - Technical Barriers to Trade

**TSANZ** - Thoracic Society of Australia and New Zealand

TTMRA - Trans-Tasman Mutual Recognition Arrangement

WTO - World Trade Organization









