

# STANDARDS AND CONFORMANCE

## THE ROLE OF SPECIALIST REGIONAL BODIES

### WHY ARE THE ELEMENTS OF THE STANDARDS AND CONFORMANCE INFRASTRUCTURE IMPORTANT?

The Standards and Conformance infrastructure, comprising metrology, standards and accreditation, and conformity assessment impact on the simplest daily activities, such as the accuracy of an alarm clock, the way the seatbelts in a car operate, and the safety of food.

The same technical 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 a metrology, standards and accreditation and conformity assessment infrastructure.

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

Why does the standards and conformance infrastructure have such a pervasive effect on people's lives? What is the role of the key technical infrastructure bodies in the APEC region?

### METROLOGY

Metrology and traceability of measurement provide the basis for successful trade and commerce. They are the foundation for all tests and measurements associated with disease diagnosis and health care, food safety, forensic science, environmental monitoring, occupational health and safety, and consumer confidence and protection.

Metrology is not, however, concerned only with trade weights and measures, although these have been fundamental to commerce for years. Metrology is also fundamental to measurement on traded products, whether grain for moisture content, natural gas for its component parts, or the chemical or biological characteristics of substances.

Many metrological requirements are supported by legislation or regulation. These aspects become part of an economy's "legal metrology system." An economy's ability to demonstrate compliance with international treaty obligations, for example, relating to trade or the environment, such as greenhouse gas reductions, also depend on the robustness of its metrological infrastructure.

### STANDARDS

Standards include specifications, regulations and procedural requirements. Adherence to standards can be either to voluntary documents or to mandatory regulation and laws. Standards are written by international organisations, national standards bodies, regulatory authorities, and trade and industry associations, with the active participation of stakeholders including technical experts from industry, government, consumer groups and other affected parties.

### ACCREDITATION AND CONFORMITY ASSESSMENT

Accreditation is a procedure by which an independent authoritative body (accreditation body) gives formal recognition that a (conformity assessment) body or a person is competent to carry out specific tasks. Accreditation involves the onsite peer assessment of conformity assessment bodies for their competence to carry out specified calibrations, tests, inspections, and/or certifications of product or personnel, to determine if they meet a required standard. These conformity assessment activities are critical to the quality and accuracy of the many products and services upon which all economies rely for, among other things, the health and safety of its citizens, and for trade.



# STANDARDS AND CONFORMANCE

## THE ROLE OF SPECIALIST REGIONAL BODIES

### SPECIALIST REGIONAL BODIES

The following five Specialist Regional Bodies are recognised by APEC.

#### ASIA PACIFIC LABORATORY ACCREDITATION COOPERATION ( APLAC ) [www.aplac.org](http://www.aplac.org)

APLAC is a cooperation of accreditation bodies in the Asia Pacific region that accredit laboratories, inspection bodies and reference material producers.

Accreditation bodies in 16 APEC economies are signatories to the APLAC Mutual Recognition Arrangement (MRA) for testing and calibration; 10 economies are covered by the APLAC MRA for inspection, 9 for ISO 15189 (medical laboratories), and 4 for accreditation of reference material producers (RMPs).

APLAC is a recognised region of the International Laboratory Accreditation Cooperation (ILAC), and cooperates with other regional groups of accreditation bodies around the world.

#### PACIFIC ACCREDITATION COOPERATION ( PAC ) [www.apec-pac.org](http://www.apec-pac.org)

The Pacific Accreditation Cooperation (PAC) is an association of accreditation bodies and other interested parties from the Asia and Pacific regions.

The PAC promotes the international acceptance of accreditations granted by its accreditation body members, based on the equivalence of their accreditation programmes.

The PAC operates within the framework of the International Accreditation Forum (IAF) and in cooperation with other regional groups of accreditation bodies around the world.

#### ASIA-PACIFIC LEGAL METROLOGY FORUM ( APLMF ) [www.aplmf.org](http://www.aplmf.org)

The Asia-Pacific Legal Metrology Forum (APLMF) is a grouping of legal metrology authorities in the Asia-Pacific Economic Cooperation (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.

#### ASIA-PACIFIC METROLOGY PROGRAMME ( APMP ) [www.apmpweb.org](http://www.apmpweb.org)

The Asia Pacific Metrology Programme (APMP) is a grouping of the region's peak national and territorial measurement laboratories primarily responsible for developing international recognition of the measurement capabilities which provides the basis for effective participation in the calibration certificates of the International Committee for Weights and Measures (CIPM) and transfer new measurement technologies to the user community.

#### PACIFIC AREA STANDARDS CONGRESS ( PASC ) [www.pascnet.org](http://www.pascnet.org)

PASC is an independent organization of Pacific area national standards organizations. An important objective of PASC is to exchange information and views between national standards bodies and among organizations interested in standardization and conformance and initiate necessary actions to help ensure that international standardization activities are properly coordinated on a consensus basis to meet world needs and foster international trade and commerce.