

STANDARDS & CONFORMANCE

THE ROLE OF THE APEC SPECIALIST REGIONAL BODIES

APLAC
PAC
APLMF
APMP
PASC

APEC has recognised four Specialist Regional Bodies (SRBs) as the expert regional bodies responsible for the development of the standards and conformance infrastructure in the Asia Pacific.

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 quality infrastructure also underpins the complex technologies and industrial processes that drive economic growth, productivity and innovation.

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.

What are the roles of the key quality infrastructure bodies identified by APEC?

METROLOGY

Metrology (the science of measurement) is an integral component of the quality infrastructure value chain. Traceability to national measurement standards is fundamental, for example, to the optimisation of production, disease diagnosis and health care, food safety, forensic science, environmental monitoring, occupational health and safety, and consumer confidence and protection.

Metrology provides the basis for standards and conformity assessment activities in both the regulatory and voluntary sectors.

Many metrological requirements are supported by legislation or regulation. These aspects become part of an economy's "legal metrology system". Metrology is also fundamental to confidence in traded products.

STANDARDS

Standards encompass a wide range of areas, and are a fundamental enabler to industry competitiveness, product functionality and compatibility, and ensuring the safety and quality of products and services. By providing a coherent basis to harmonise technical specifications of products and services, international standards reduce barriers to international trade and lay the foundation to wider market access.

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, academia, consumer groups and other affected parties.

ACCREDITATION AND CONFORMITY ASSESSMENT

Accreditation is an activity by which an independent authoritative body (accreditation body) gives formal recognition that a (conformity assessment) body is competent to carry out specific conformity assessment activities. Accreditation involves the assessment of conformity assessment bodies for their competence to carry out audits, calibrations, certifications, evaluations, examinations, inspections, tests, self-declarations and/or validation and verifications. The objects of conformity that can be covered by accredited conformity assessment results includes products, processes, services, management systems, installations, projects, data, designs, materials, claims, persons, bodies or organizations, or any combination thereof. Accredited conformity assessment results are critical for accuracy, safety and quality upon which all economies rely for domestic and trade purposes.

APEC SRBs:

APAC



Further information

Page 2



APAC ASIA PACIFIC ACCREDITATION COOPERATION www.apac-accreditation.org

The Asia Pacific Accreditation Cooperation (APAC) was established on 1 January 2019 by the amalgamation of two former regional accreditation cooperations – the Asia Pacific Laboratory Accreditation Cooperation (APLAC) and the Pacific Accreditation Cooperation (PAC).

APAC is an association of accreditation bodies and other interested parties from the Asia Pacific region. APAC promotes the international acceptance of accreditations granted by its members and the conformity assessment results of its members' accredited conformity assessment bodies. It operates a Mutual Recognition Arrangement (MRA), through which members agree to recognise each other's accredited conformity assessment results in areas such as biobanking, calibrations, laboratory test reports, medical testing results, inspection reports and certificates, certifications, reference materials, proficiency testing, and validation and verifications (including GHG emissions, carbon footprints and sustainability information). This reduces technical barriers to trade, avoids duplication, and lowers costs and saves time for business. APAC is recognised by the Global Accreditation Cooperation (formerly the International Accreditation Forum (IAF) and the International Laboratory Accreditation Cooperation (ILAC)) as the regional accreditation cooperation for the Asia Pacific region, and operates within the framework of international cooperation to support trade facilitation, sustainable development, and regional prosperity.



APLMF ASIA PACIFIC LEGAL METROLOGY FORUM 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.

It was established to build the capabilities of legal metrology authorities and to raise awareness of the economic and social benefits of legal metrology across Asia-Pacific economies. The organisation coordinates and delivers regional training programmes to support its members in legal metrology, enabling them to adapt to the evolving needs of an effective legal metrology infrastructure. The Asia-Pacific Legal Metrology Forum promotes mutual recognition arrangements among its members to foster and maintain confidence in measurement (metrological control) among legal metrology authorities throughout the Asia-Pacific region.



APMP ASIA-PACIFIC METROLOGY PROGRAMME www.apmpweb.org

The Asia-Pacific Metrology Programme is a collaboration of the region's peak measurement institutes with the primary objective of developing regional measurement capabilities and international recognition of these capabilities. This then provides the basis for effective participation in the global Mutual Recognition Arrangement of the International Committee for Weights and Measures (the CIPM MRA) whereby signatories establish the degree of equivalence of national measurement standards and recognise each other's calibration and measurement certificates.

APMP's mission is to promote and support measurement infrastructure in the Asia-Pacific region that facilitates international trade, improves industrial efficiency and competitiveness, ensures equity in the marketplace, and enhances the quality of life and the environment.



PASC PACIFIC AREA STANDARDS CONGRESS www.pascnet.org

PASC is an independent grouping of Pacific area national standards organisations. One of its primary objectives is to strengthen the international standardisation programmes of the International Organization for Standardization (ISO) and the International Electrotechnical Commission (IEC), and improve the ability of Pacific Rim national standards organisations to participate in these programmes effectively. As part of its role, PASC also facilitates information exchange between national standards bodies and entities interested in standardisation. It also initiates necessary actions to coordinate international standardisation activities to foster international trade and commerce, and address global needs.

Membership

Page 3

APEC Economies with SRB Membership

| SRB | APAC | APLMF | APMP | PASC |
|----------------------------|------|-------|------|------|
| Australia | ✓ | ✓ | ✓ | ✓ |
| Brunei Darussalam | ✓ | ✓ | ✓ | |
| Canada | ✓ | ✓ | | ✓ |
| Chile | | | | |
| People's Republic of China | ✓ | ✓ | ✓ | ✓ |
| Hong Kong, China | ✓ | ✓ | ✓ | ✓ |
| Indonesia | ✓ | ✓ | ✓ | ✓ |
| Japan | ✓ | ✓ | ✓ | ✓ |
| Republic of Korea | ✓ | ✓ | ✓ | ✓ |
| Malaysia | ✓ | ✓ | ✓ | ✓ |
| Mexico | ✓ | | | ✓ |
| New Zealand | ✓ | ✓ | ✓ | ✓ |
| Papua New Guinea | ✓ | ✓ | ✓ | ✓ |
| Peru | | ✓ | | ✓ |
| Philippines | ✓ | ✓ | ✓ | ✓ |
| Russian Federation | ✓ | ✓ | ✓ | ✓ |
| Singapore | ✓ | ✓ | ✓ | ✓ |
| Chinese Taipei | ✓ | ✓ | ✓ | |
| Thailand | ✓ | ✓ | ✓ | ✓ |
| United States | ✓ | ✓ | ✓ | ✓ |
| Viet Nam | ✓ | ✓ | ✓ | ✓ |

Non-APEC Economies with SRB Membership

Of the non-APEC economies, the following are members of one or more SRBs: Azerbaijan, Bangladesh, Belgium, Cambodia, Colombia, Ecuador, Fiji, Gulf Region, India, Iran, Kazakhstan, Kiribati, Kyrgyz Republic, Laos, Macao - China, Mongolia, Myanmar, Nepal, New Caledonia, Pakistan, Qatar, Samoa, Saudi Arabia, Sri Lanka, Switzerland, Tajikistan, Tonga, United Arab Emirates, United Kingdom, Uzbekistan and Vanuatu.