

# APAC

ASIA PACIFIC  
ACCREDITATION COOPERATION

Competence | Acceptance | Equivalence

# SMART ASSURANCE

## Accreditation for Digital Trust



Digital transformation is changing how products and services are designed, built, delivered and monitored. Smart manufacturing, connected healthcare, digital supply chains and remote oversight can improve efficiency and outcomes, but only when stakeholders can trust the underlying systems, data and results.



Confidence in smart technologies depends on credible, independent assurance. "Accreditation" supports this as it ensures the reliability, impartiality and global acceptance of the digital systems, data, testing and certification. Alignment to global standards facilitates seamless data exchange, interoperability and cross border acceptance of services, and helps manage risks.

# WHERE ASSURANCE IS MOST NEEDED

In a digital environment, stakeholders often need confidence in:

Cybersecure systems and data privacy

01



Automated testing and remote monitoring

02



Digital certificates and e-audits

03



Smart manufacturing assessment

04



Traceability across supply chains

05



In the emerging digital scenario, there is a need for integration of Industry 4.0 systems, the Internet of Things (IoT), Artificial Intelligence (AI), data analytics, and automation, with assurance mechanisms that ensure compliance, quality, safety, reliability, and conformity.

Conformity assessment ensures that technologies have assurance in processes. This is undertaken by:

- Testing
- Inspection
- Certification
- Accreditation
- Cybersecurity
- Assurance, and
- Regulatory compliance

Robust Assurance processes builds trust in smart industrial ecosystems using applicable international standards, few of which include:

-  Calibration and testing (ISO/IEC 17025) of sensors, robots, machines
-  Verification of digital twins and predictive models (ISO/IEC 30173)
-  Validation of AI decision systems (ISO/IEC DTS 42119-3)
-  Secure digital platforms
-  Compliance with cybersecurity standards (ISO/IEC 27001)
-  Verification of smart designs
-  Certification of claims for digital health care and e-diagnostics
-  Remote inspection assessments (ISO/IEC 17020)



## BENEFITS FOR INDUSTRY



**Higher productivity through automation and optimized processes**



**Improved product quality, consistency, and operational and maintenance costs**



**Predictive maintenance and improved asset reliability**



**Faster time-to-market and greater production flexibility**

# BENEFITS FOR CONSUMERS AND END USERS

**Better quality, safer and more reliable products**

**Greater product transparency and traceability**

**Customized products at competitive prices**

**Improved after-sales support through smart monitoring**

**Data protection**

**Enhanced customer satisfaction through consistent product performance**

# BENEFITS FOR GOVERNMENTS AND REGULATORS



**Enhanced compliance monitoring  
through digital traceability**



**Data-driven policy formulation and  
oversight  
Improved industrial safety and  
environmental protection**



**Implementation of Smarter regulation  
and Reduced enforcement and  
Credibility and lose word overs**



**Support for national initiatives on  
digitalization and manufacturing  
excellence**

# BENEFITS FOR CONFORMITY ASSESSMENT BODIES

**Leadership in digital innovation**

**Increased relevance in validating smart technologies and digital systems**

**Expansion of assessment scopes  
(cybersecurity, data integrity, AI, IoT)**

**Strengthened trust and credibility in  
smart industrial ecosystems**

**Recognition**

## BENEFITS FOR SOCIETY AND ENVIRONMENT



**Long-term economic growth and competitiveness**



**Improved sustainability through energy efficiency and reduced emissions**



**Responsible and transparent industrial practices**



**Enhanced product quality and innovation through adoption of global standards**



# CASE STUDY ELECTRIC VEHICLE:

A case study can be cited for Electric Vehicle wherein the Challenge is Multiple testing of EV batteries across economies using different standards. Using Accredited Conformity Assessment Bodies enables Testing of batteries for thermal, EMC performance in extreme conditions thereby leading to an impact in approx. 30% faster approvals and stronger regulator confidence with harmonized standards, conformity assessment and accreditation systems.



# CASE STUDY HEALTH CARE:

Assessment by accredited conformity assessment bodies to review the cyber security and privacy controls and digital audit trails assures hospital and health care businesses that use AI based diagnostic platforms are accurate, trustworthy, secure and compliant. This ensures 50% faster clinical acceptance, wider adoptions, identification of digital security issues and easier compliance ensuring trusted health care.

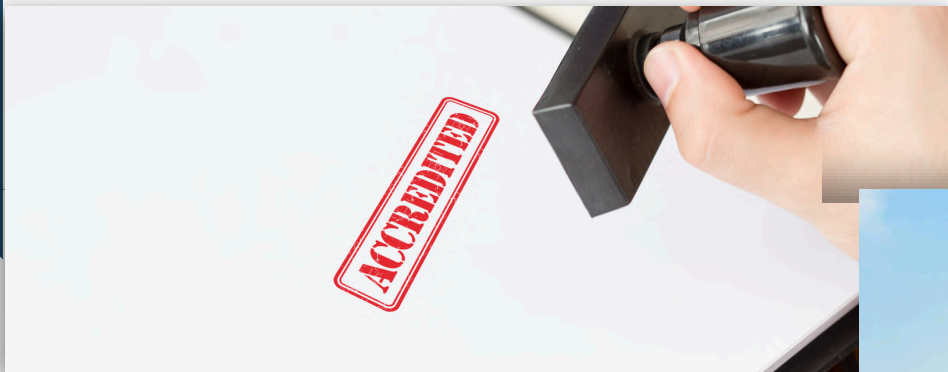
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## APAC Matters

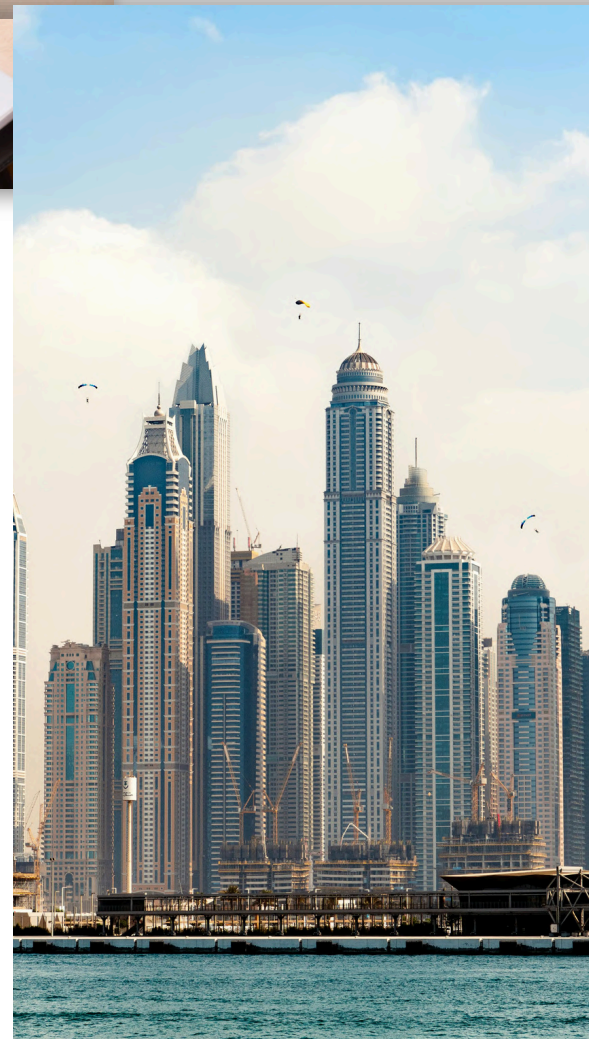
APAC connects economies in Asia Pacific and globally through Mutual Recognition Arrangements (MRAs), which helps global trade. This further facilitates:

- Acceptance of reports and certificates cross borders
- Confidence for regulators
- Credibility for customers

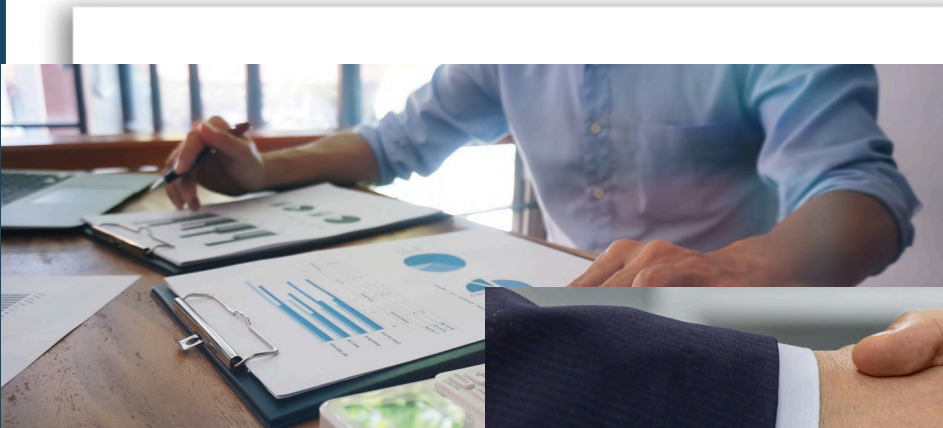


In pursuit of the objective to digitalize APAC activities, APAC, in collaboration with the PTB, Germany, has initiated a new project titled “Digital Transformation of Accreditation in Asia Pacific” (ADAPT).

The project commenced on 1 May 2022 and is currently ongoing.



The implementation of the ADAPT project is supporting to facilitate effective interconnections within APAC and hence further facilitate the harmonization of accreditation in the Asia-Pacific region. Through this project, APAC empowers members to transition from traditional paper-based systems to agile, data-driven frameworks. This is of major significance as regional and global markets are increasingly demanding higher quality and accreditation needs to be able to respond quickly and efficiently to these growing demands.



**Accreditation establishes credibility, trust via robust standards (like data privacy, security, AI ethics) and certification in digital advancements.**

# ABOUT APAC

The Asia Pacific Accreditation Cooperation (APAC) is the regional association of accreditation bodies in Asia Pacific with the primary role to manage and expand a mutual recognition arrangement (MRA) among accreditation bodies.

The MRA facilitates the acceptance of conformity assessment results (eg. test reports, inspection reports, management system certificates) across the region and with other regions around the world thereby facilitating trade. Mutual recognition is granted to an accreditation body by APAC after conducting successful peer evaluation as per requirements of ISO/IEC 17011. APAC has partnerships with Global Accreditation Cooperation Incorporated (Global ACI), regional bodies and donor agencies.

For more information Please click [here](#).