



ACCREDITATION SUPPORTING TRADE: CASE STUDIES

APAC

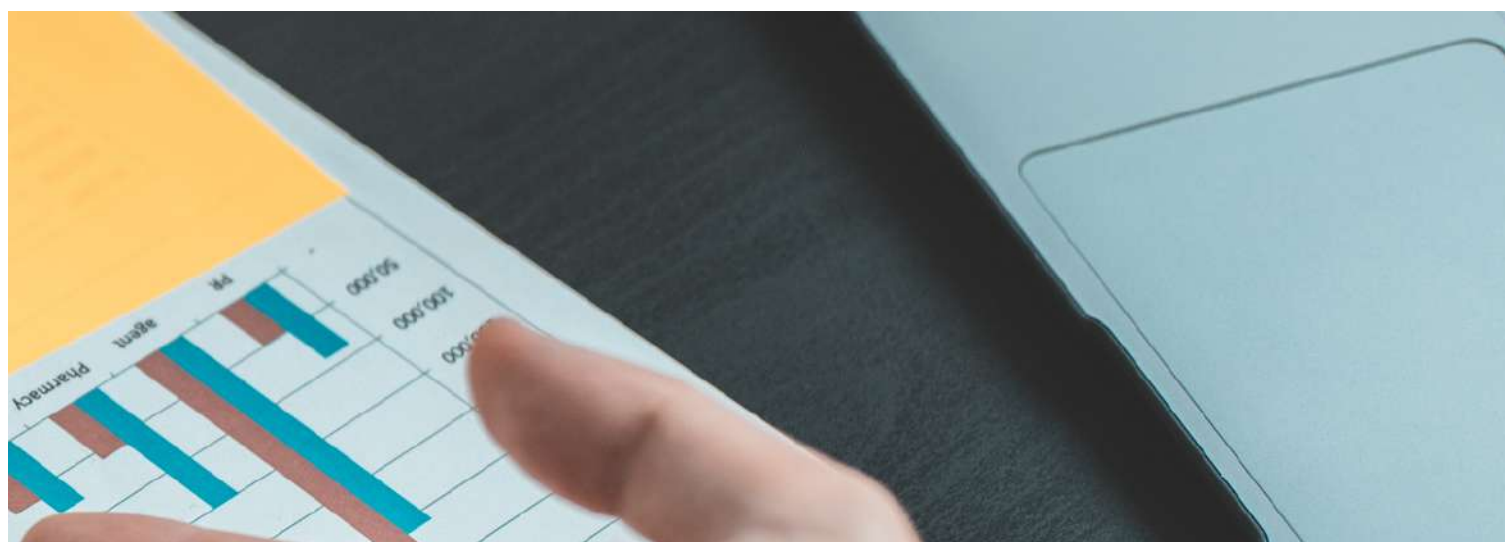
ASIA PACIFIC
ACCREDITATION COOPERATION

Competence | Acceptance | Equivalence

FOREWORD

The world is becoming globalised and there are different regulatory/standard requirements at national and international level for products to move in the market. The trade and economies are driven by complex supply chains, rapidly changing regulations, sustainability expectations, digital technologies, and increasing consumer awareness regarding safety, quality, environmental responsibility, and ethical sourcing.

Nations and industries require trusted mechanisms that assure products and services consistently meet regulatory, customer, and international requirements. Trust and Confidence are key enablers of trade in this environment. “**Accreditation**” serves as one of the most important pillars in building this confidence.



GLOBAL TRADE AND ACCREDITATION

Modern supply chains may involve:

1

Raw materials sourced from multiple countries

2

Manufacturing across different regions International logistics networks

3

Component suppliers from several continents

4

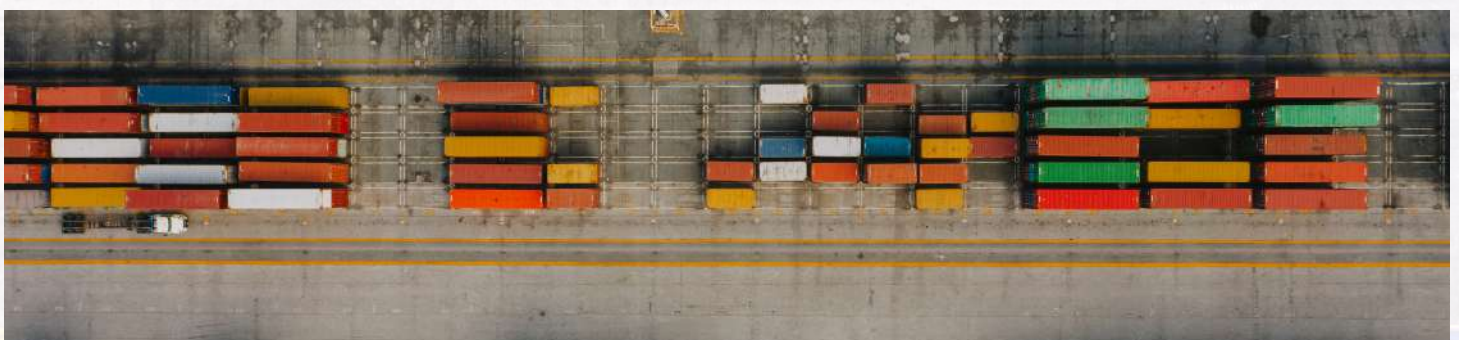
Cross-border testing and certification activities

5

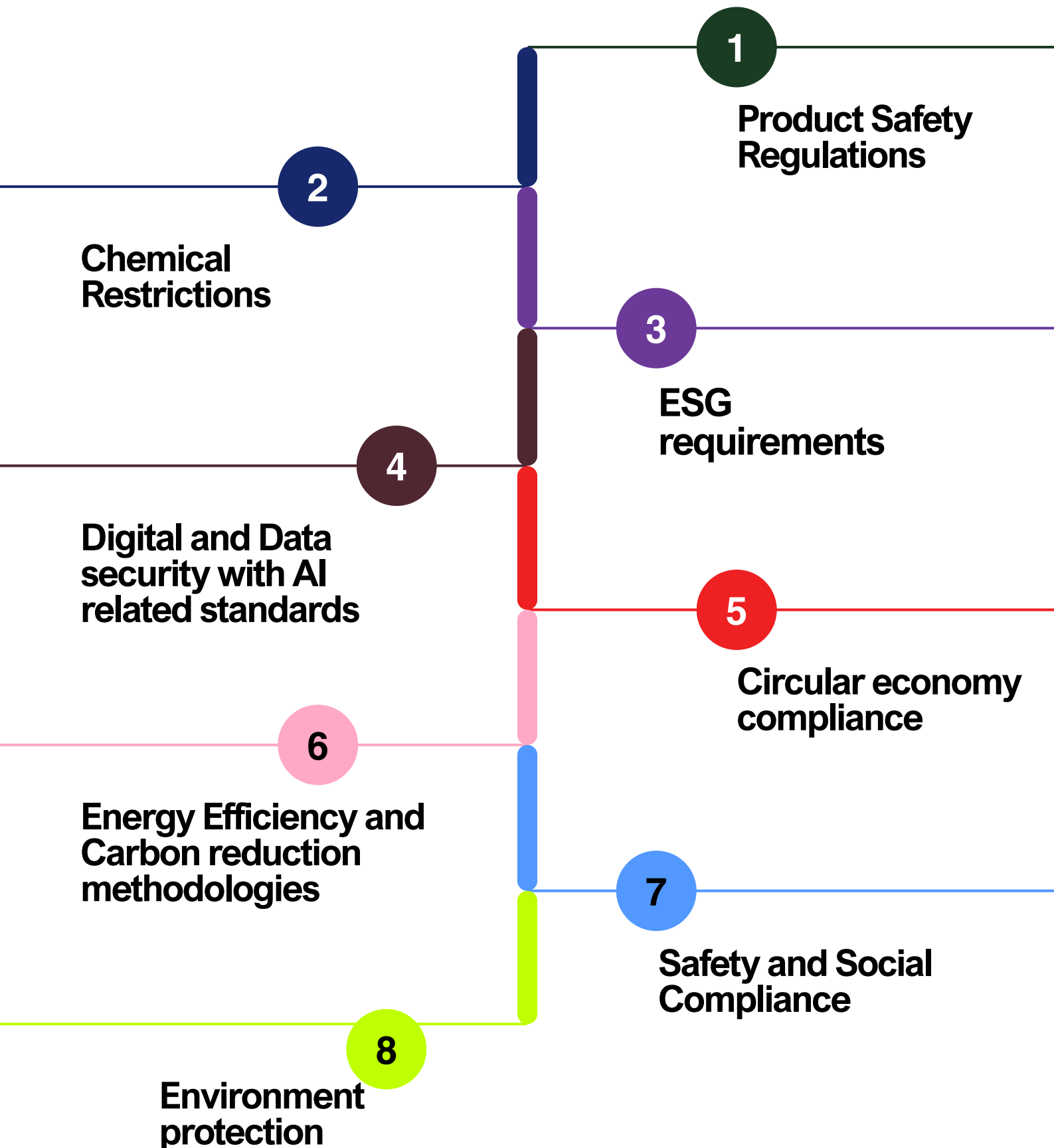
Sustainability and traceability requirement

6

Multiple regulatory jurisdictions



As global supply chains become more interconnected, technical requirements have also expanded significantly.
Compliances requirements for exported products is following:



Accreditation provides formal recognition that conformity assessment bodies — including laboratories, inspection bodies, certification bodies, validation and verification bodies, and proficiency testing providers — are technically competent, impartial, and capable of delivering reliable results.

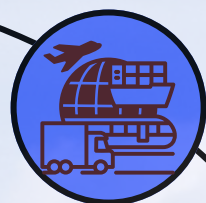


Through internationally recognized accreditation systems, countries and industries are able to build trust in testing, inspection, certification, calibration, validation, and verification activities across borders.

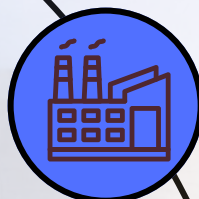
Internationally recognized accreditation systems operate through cooperation among accreditation bodies worldwide. The cooperations are at regional level as well as international level. Asia Pacific Accreditation Cooperation is the regional cooperation of accreditation bodies and related members. APAC members have a Mutual Recognition Arrangements (MRAs), which allows acceptance of results and certificates and follow the principle of **“Accredited once, accepted everywhere.”**



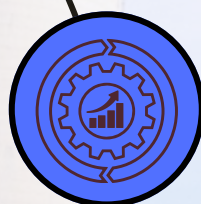
ACCREDITATION CONTRIBUTES TO



Export Competitiveness



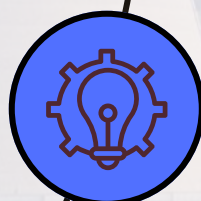
Industry Modernization



Product Quality Improvement



Regulatory Effectiveness



Innovation Ecosystem

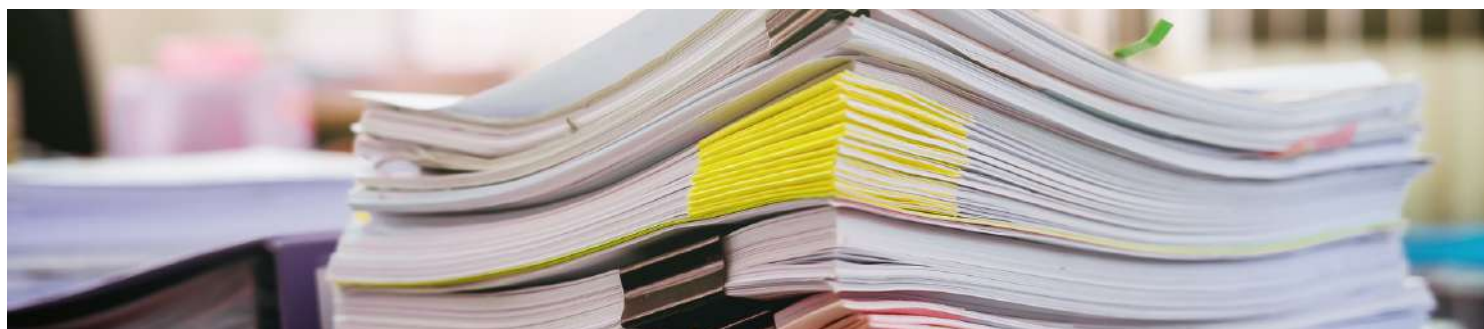


Consumer Safety



Sustainable Development

This document serves as a template for compiling case studies that demonstrate the positive impact of accreditation and the APAC Mutual Recognition Arrangement (MRA) on international trade. Accreditation promotes competitive domestic markets and facilitates trade for both importers and exporters by reducing technical barriers to trade and enhancing confidence in conformity assessment results



The document presents a collection of success stories from accreditation bodies across the Asia-Pacific region, illustrating how accreditation and the APAC MRA contribute to the acceptance of test, calibration, inspection, and certification results across economies. These case studies highlight the role of accreditation in facilitating trade, improving market access, reducing duplication of conformity assessment activities, and enabling the faster movement of goods, services, and products while supporting regulatory compliance and consumer confidence.



CASE STUDY 1

Hong Kong Accreditation Service (HKAS)

Economy: Hong Kong, China

Sector:

Residential Care Home Service for Elderly in Hong Kong

Type of Conformity Assessment:

Management System Certification

SDG Addressed

- **SDG 3** – Good Health and Well-being
- **SDG 9** – Industry, Innovation & Infrastructure

Background

Back in July 2012, the Census and Statistics Department of the Government of the Hong Kong Special Administrative Region published the report “Hong Kong Population Projection 2012–2041.” It projected that the proportion of the population aged 65 or above would increase significantly, from 13% in 2011 to 30% by 2041. This demographic shift indicated a substantial rise in demand for residential care home services for the elderly in Hong Kong over the coming decades.

In parallel, growing public awareness and concern regarding the quality of services provided by residential care homes have, over the years, encouraged many service providers in Hong Kong to seek certification from third-party certification bodies as a means of demonstrating their commitment to quality service delivery.



Note:

The “Hong Kong Accreditation Service (HKAS) Accreditation Programme for the Residential Care Homes (Elderly Persons) Service Providers Management System Certification” was launched in 2013, with reference to the population projections available at that time. According to the more recent “Hong Kong Population Projections 2022–2046,” population ageing is expected to continue, with the proportion of individuals aged 65 or above projected to reach 36% by 2046.



Initiation

The Hong Kong Accreditation Service, together with relevant government departments, academic institutions, practitioners, and other stakeholder groups, recognized that accrediting certification bodies for the management systems of residential care home (elderly persons) service providers (hereafter referred to as “RCHE-MS certification”) would provide formal recognition to such bodies and assure their competence in delivering certification services. This, in turn, would contribute to enhancing the overall quality of residential care home services.

Following approximately one year of preparation, HKAS launched a new accreditation service in June 2013 titled “Accreditation Programme for Residential Care Homes (Elderly Persons) Service Providers’ Management System Certification.” This programme was introduced under its Hong Kong Certification Body Accreditation Scheme.

Results and Impact

There are currently two local RCHE-MS certification bodies accredited by the Hong Kong Accreditation Service. As of April 2025, a total of 137 residential care homes have been certified by these bodies, helping to build trust and confidence in the quality of care home services and supporting their acceptance in the market.

This accreditation service is aligned with United Nations Sustainable Development Goal 3: Good Health and Well-being, which focuses on ensuring healthy lives and promoting well-being for people of all ages.



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CASE STUDY 2

National Association of Testing Authorities (NATA)

Economy: Australia

Sector

Grains and grain-based products, with a focus on laboratory testing that supports domestic supply chains and international trade (export markets). Australia is a major producer of grains and grain-based products used to feed people and livestock domestically and globally. The Australian Export Grains Innovation Centre (AEGIC) works to increase value in the Australian grains industry by supporting breeding programs, product development, and verification testing for manufacturers and exporters.

Background

Grain quality and performance characteristics have a direct impact on food manufacturing outcomes and determine suitability for specific end uses. Grain buyers and food manufacturers rely on accurate and reliable data to assess whether grain meets the functional requirements for products such as bread, noodles, and other grain-based foods. At the same time, major food manufacturers operate under strict legal and market obligations to accurately declare product composition. In this context, trustworthy laboratory data is critical—not only for informed commercial decision-making but also for maintaining consumer confidence and ensuring regulatory compliance.

For export markets, confidence in laboratory results plays an equally important role. Reliable, internationally recognised testing helps reduce technical barriers to trade by demonstrating that results are generated by competent laboratories oper-



Type of Conformity Assessment

- **Testing Laboratories (ISO/IEC 17025)**

SDG Addressed

- **SDG 2** – Zero Hunger
- **SDG 9** – Industry, Innovation and Infrastructure
- **SDG 12** – Responsible Consumption and Production

ating in accordance with established global standards.

Initiation

The Australian Export Grains Innovation Centre's Sydney laboratories have been at the forefront of grain quality assessment and innovation for more than 75 years. For approximately 70 of those years, the laboratories have maintained accreditation from the National Association of Testing Authorities Australia, demonstrating a sustained commitment to technical competence, continual improvement, and the delivery of reliable analytical services.

AEGIC regards accreditation as a core element of its operational culture and performance framework. Its long-standing relationship with NATA is viewed as a key driver for the continuous enhancement of laboratory systems and processes, ensuring that customers can place a high level of trust in the integrity and quality of its testing outcomes.

Results and Impact

Accreditation of the Australian Export Grains Innovation Centre laboratories by the National Association of Testing Authorities Australia has delivered measurable benefits across trade, industry collaboration, and customer confidence:

1. Stronger market acceptance in high-value decisions

Accreditation has enhanced the credibility of AEGIC's test data, making it widely accepted in high-stakes, value-driven decisions. The organisation supports industry partners in initiatives such as grain breeding programs and technical collaborations with food manufacturers—where decisions based on laboratory data can involve investments worth millions of dollars. Accredited results ensure these decisions are consistent, technically defensible, and reliable.

2. Improved confidence across manufacturers, exporters, and end markets

AEGIC's clients include major food manufacturers that are legally required to accurately declare product composition. NATA accreditation provides assurance that the underlying test data is robust and competent. This strengthens trust not only for manufacturers but also for downstream stakeholders, including exporters, retailers, and consumers.

3. Facilitation of international trade and reduced re-testing risk

In export markets, confidence in laboratory results is critical. Accredited reports carrying the “NATA stamp” are widely trusted by international buyers and end users, helping to:

- Reduce uncertainty in purchasing decisions
- Minimise the need for duplicate testing
- Avoid costly disputes and shipment delays

This directly supports smoother and more efficient global trade of Australian grain.



4. Reduced time and cost through reliability of results

Because accredited data is widely accepted, the need for re-testing is significantly lowered. This leads to:

- Faster decision-making
- Lower operational costs
- Streamlined supply chain processes

5. Continuous improvement and sustained technical capability

AEGIC identifies accreditation as a driver for maintaining “top of your game” performance. Through its relationship with NATA, the laboratories continuously refine their systems, methodologies, and quality controls—ensuring ongoing alignment with international best practices.

6. Enhanced global recognition and regulatory confidence

Accreditation strengthens AEGIC's reputation as a competent and internationally credible testing provider. This supports compliance with regulatory requirements and reinforces Australia's standing in global grain markets.

In summary: accreditation acts as a quality assurance mechanism that underpins trust, reduces trade friction, and supports high-value decision-making—quite literally becoming “the proof in the pudding, or the bread or the noodles.”

Contact

NATA (Australia)

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Case study 3

Bureau of Accreditation

Sector:

ICT Product Certification

Type of Conformity Assessment:

Product Certification

SDG Addressed

- SDG 9 – Industry, Innovation & Infrastructure

Background

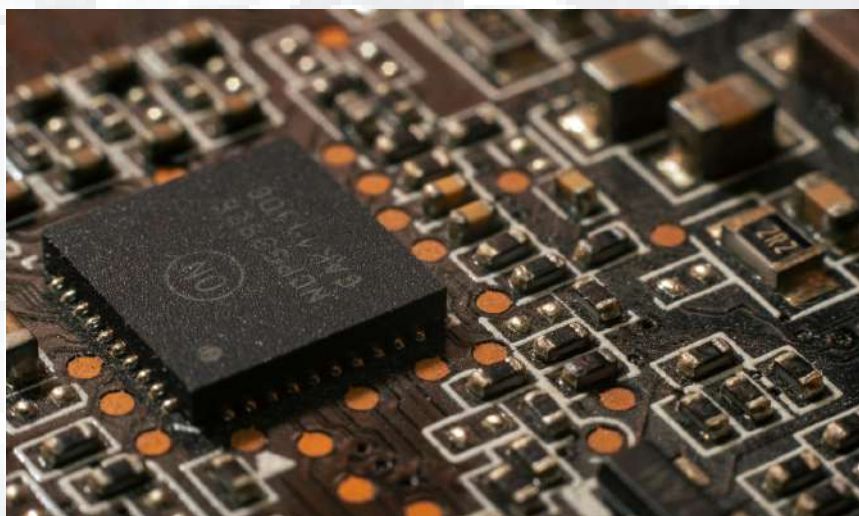
Before 2011, ICT products classified as having high safety risks were subject to mandatory certification when imported into Vietnam. To implement this requirement, the government designated several certification bodies (CBs) responsible for conducting conformity assessment activities. The certification process typically involved product sampling, laboratory testing, evaluation of results, and issuance of certificates.



However, at that time, these CBs were not accredited to ISO/IEC 17065, which resulted in several systemic limitations:

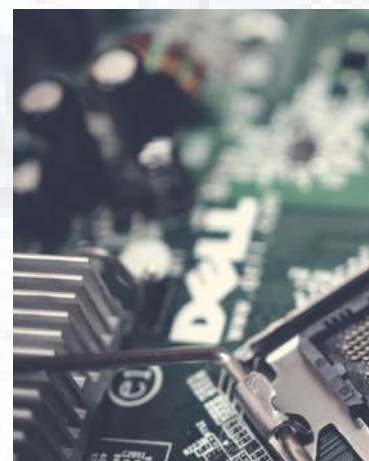
- Certification methodologies were not clearly defined or standardised
- Validity periods of certificates were not consistently specified
- There was no framework for mutual recognition of certification and testing results

These gaps had direct implications for businesses engaged in import and trade. In particular, the lack of standardisation and recognition mechanisms led to prolonged certification timelines, duplication of testing efforts, and increased operational costs, including warehousing expenses and delays in market entry.



Initiation

Since 2011, certification bodies for ICT products in Vietnam have progressively obtained accreditation, and certification activities have been implemented in a more structured and consistent manner in accordance with internationally recognised standards such as ISO/IEC 17065 and ISO/IEC 17067.



Results and Impact

Following the accreditation of ICT certification bodies in Vietnam in line with ISO/IEC 17065 and ISO/IEC 17067, the certification ecosystem has undergone significant improvements in professionalism, efficiency, and international alignment:

1. More professional and effective certification process

The certification procedure is now standardised and systematically implemented, typically including:

- Certification application
- Certification review
- Certification planning
- Assessment (Methods 1, 5, or 7)
- Corrective actions
- File review
- Certification decision



The certification schemes (Types 1, 5, and 7) are clearly defined, enabling certification bodies to select the most appropriate method depending on product characteristics and risk level. This structured approach enhances consistency, traceability, and technical reliability.

2. Time and cost savings for businesses

The clear definition of certification methods allows optimisation of assessment approaches:

- Method 5 (factory audit at exporter's site) ensures product quality at source while reducing the need for repeated lot-by-lot inspection and testing.
- Minimisation of redundant procedures leads to faster certification timelines and reduced operational costs for enterprises.

3. International recognition and reduced re-testing

Under the Asia-Pacific Economic Cooperation Mutual Recognition Arrangement for Telecommunications Equipment (APEC TEL MRA), Vietnam has established regulations for recognising foreign test results (Circular 28/2014/TT-BTTTT).

Key outcomes include:

- Testing laboratories must be accredited to be recognised.
- The Ministry of Science and Technology Vietnam publishes a list of recognised laboratories.
- Currently, around 80 laboratories from countries such as the United States, South Korea, Canada, and Singapore are recognised.
- Test results issued by these accredited laboratories are accepted by Vietnamese authorities without the need for re-testing. This significantly:
 - Reduces testing costs
 - Eliminates duplication
 - Shortens time-to-market by avoiding delays related to sampling and testing

4. Facilitation of import and export activities

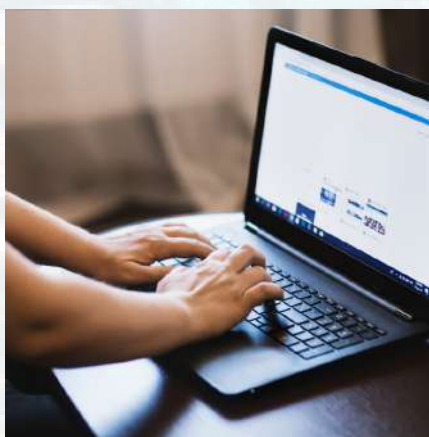
The strengthened certification and accreditation framework has directly supported trade growth. ICT product import–export turnover in Vietnam has increased dramatically:

- 2011: approximately USD 6 billion
- 2024: exceeding USD 200 billion

This substantial growth reflects:

- Increased efficiency in conformity assessment processes
- Greater international trust in accredited results
- Reduced technical barriers to trade





5. Contribution to sectoral and trade development

The integration of accredited certification and internationally recognised testing has:

- Enhanced regulatory compliance and transparency
- Strengthened confidence among global trading partners
- Supported the rapid expansion of Vietnam's ICT sector

Contact

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SUMMARY

Accreditation and mutual recognition frameworks have transformed ICT product certification in Vietnam into a streamlined, credible, and internationally aligned system—significantly reducing costs and delays while enabling strong growth in global trade.

CASE STUDY 4

American Association for Laboratory Accreditation (A2LA)

Sectors

- Mechanical Testing
- Implantable Cardiovascular Devices

Type of Conformity Assessment

Testing Laboratories (ISO/IEC 17025)

SDG Addressed

SDG 3: Good health and wellbeing

SDG 9: Industry innovation and infrastructure

Background:

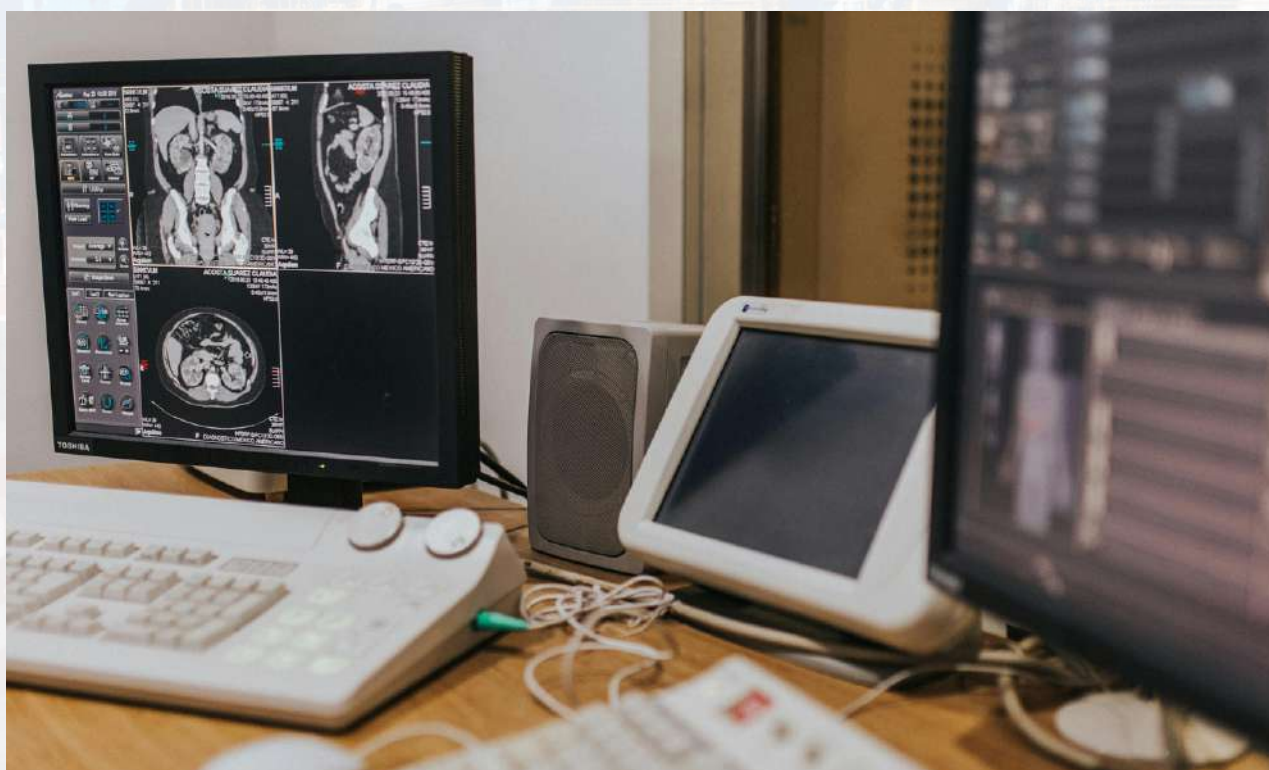
Founded in 2009, ViVitro Labs provides specialised engineering solutions to evaluate the functional performance of passive, implantable cardiovascular devices under real, physiological, and accelerated conditions..

The company's operating philosophy centres on being a trusted partner to its clients by offering pre-configured testing systems, along with modular and versatile components that support a broad range of applications across the product lifecycle—from early research and design through to verification and validation. As highlighted by its President, Karim Mouneimne, the organisation aims to empower medical device engineers to become self-sufficient by equipping them with reliable and fit-for-purpose testing methodologies, while also transferring critical technical knowledge.

Accreditation to ISO/IEC 17025 plays a central role in ViVitro Labs' operations. It enhances the reliability and technical validity of medical device performance testing, directly contributing to improved patient safety at the pre-clinical stage.



Through this accredited framework, ViVitro supports its clients in navigating the complexities of in-vitro testing with confidence and consistency. In addition, ViVitro Labs actively contributes to the development of international standards by participating in working groups under International Organization for Standardization and ASTM International. This involvement ensures that the organisation remains at the forefront of both technological innovation and evolving regulatory requirements in the medical device sector.



Summary/Brief on the Initiative:

For three years, ViVitro Labs operated two laboratories—one in Victoria, British Columbia and the other in Marseille—under separate quality management systems (QMS). Each laboratory was accredited by different accrediting bodies, operated in different languages, and functioned across a nine-hour time difference. This fragmented structure resulted in increased operational costs, duplication of quality management efforts, and inconsistencies in requirements between the two sites. In 2019, Karim Mouneimne initiated a strategic effort to streamline operations, reduce inefficiencies, and harmonise the QMS across both laboratories. The objective was to establish a unified system and obtain accreditation to ISO/IEC 17025 through a single accrediting body—A2LA.

Key Challenges in QMS Integration

The transition from two independent systems to a single harmonised QMS presented several technical and operational challenges:

- **Alignment of accrediting body requirements**

Each laboratory had developed processes tailored to different accreditation bodies. The integration required identifying, reconciling, and either incorporating or eliminating AB-specific requirements to create a unified, compliant system.

- **Defining a common QMS structure**

Establishing a single, coherent structure that would be applicable across both locations required careful design to ensure consistency, scalability, and compliance.

- **Language standardisation**

Portions of the Marseille laboratory's QMS were originally documented in French, necessitating accurate translation into English while preserving technical intent and regulatory compliance.

- **Legacy system constraints**

The Marseille laboratory's QMS had initially been developed in accordance with ISO 13485 and later adapted to meet ISO/IEC 17025 requirements for mechanical testing. As a result, certain legacy elements persisted, requiring critical review and restructuring to fully align with ISO/IEC 17025.



Outcome Direction

Despite these complexities, the initiative laid the groundwork for a unified, efficient, and internationally aligned QMS. By consolidating systems and standardising processes, ViVitro positioned itself to reduce duplication, improve consistency, and enhance overall operational effectiveness while maintaining compliance with globally recognised standards.



Results and impacts post accreditation:

The merger of the two quality management systems enabled ViVitro Labs to significantly streamline its operations, resulting in measurable cost savings and creating new opportunities for continual improvement. This harmonised approach enhanced consistency across both laboratories and strengthened customer confidence in the reliability and integrity of test results.

A key outcome of the integration was the ability to conduct high-level interlaboratory studies between the Marseille and Victoria, British Columbia facilities. These studies enabled direct comparison of testing performance across sites, supporting improved method validation and technical alignment.

To date, ViVitro has completed two interlaboratory studies focused on its primary test methods:

- Particulate matter evaluation
- Hydrodynamic pulsatile flow testing

The findings from these studies identified multiple areas for improvement, allowing the organisation to refine procedures and reinforce its validation processes. Building on this progress, ViVitro plans to undertake an accelerated wear testing (AWT) study as the next phase of its continuous improvement strategy.

Through these initiatives, ViVitro has strengthened the quality, reproducibility, and robustness of its testing services. This aligns closely with the expectations of clients operating in a highly regulated medical device environment. As emphasised by Karim Mouneimne, working with a laboratory accredited to ISO/IEC 17025 provides assurance that testing is conducted with a high level of technical competence, thereby reducing risk and supporting regulatory compliance.

Contact

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CASE STUDY 5

Entidad Mexicana de Acreditación (EMA)

Economy: Mexico

Sector

Inspection of National Water Use

Type of Conformity Assessment

Inspection Bodies (ISO/IEC 17020)

SDG Addressed

- **SDG 6** – Clean Water and Sanitation
- **SDG 9** – Industry, Innovation and Infrastructure
- **SDG 12** – Responsible Consumption
- **SDG 13** – Climate Action
- **SDG 16** – Peace, Justice and Strong Institutions



Background

The extraction of national waters from bodies owned by the State constitutes a critical element in achieving integrated, transparent, and efficient water resource management in Chile. This activity supports not only the sustainable utilisation of water resources but also the protection of public interests as established under the National Waters Law Chile.

Ensuring that water extraction is conducted in compliance with regulatory provisions is essential for:

- Preserving water availability across competing uses
- Promoting equitable access among users
- Maintaining long-term hydrological balance

Such governance frameworks play a central role in safeguarding water as a strategic national resource while enabling its responsible use for economic and social development.

Initiation

In the current operation and monitoring of national water use, a classic principal-agent problem emerges due to information asymmetries between water users and regulatory authorities. Users typically possess more accurate knowledge of the actual volumes extracted, while authorities rely on reported data. This imbalance can lead to inefficiencies in resource allocation, weaken enforcement, and create opportunities for underreporting or misrepresentation of water use. In the absence of precise and reliable data, authorities face significant constraints in implementing regulations, defining equitable allocations, and formulating evidence-based public policies.



Importance of Accurate Measurement

To address these challenges, the accurate measurement of volumes of national waters used, exploited, or utilised has become a critical control mechanism. High-precision measurement systems contribute to:

- **Certainty and transparency:** Reliable quantification of water use strengthens trust among regulators, users, and stakeholders.
- **Real-time data availability:** Continuous or near real-time monitoring enables both users and authorities to make informed decisions and promotes efficient water use practices.
- **Prevention of underreporting and misuse:** Accurate measurement reduces the risk of undeclared extraction and resource hoarding, ensuring compliance with legal and environmental requirements.

Role of Accredited Inspection Bodies

Within this framework, Inspection Bodies accredited under ISO/IEC 17020:2012 play a pivotal role in ensuring the integrity of the system. These bodies are responsible for:

- Verifying the proper installation and operation of measurement devices and systems
- Assessing the methodologies used for volume measurement
- Evaluating the procedures for data transmission to the Comisión Nacional del Agua

Impact of Accredited Inspections

These inspection and verification activities ensure:

- **Consistency:** Uniform application of measurement standards across users and regions
- **Traceability:** Clear linkage between measured data and reporting systems
- **Reliability:** Confidence in the accuracy and integrity of water use data

In summary:

Accreditation-based inspection systems help close information gaps, strengthen regulatory oversight, and support sustainable water governance by ensuring that measurement data is accurate, verifiable, and trusted by all stakeholders.

Results and Impact

Currently, there are 19 accredited Inspection Bodies operating under this scheme, providing nationwide coverage and technical oversight. Their participation plays a critical role in strengthening water governance by improving measurement reliability, reinforcing regulatory compliance, and increasing the availability of trustworthy technical data for decision-making.

These accredited bodies, operating in accordance with ISO/IEC 17020:2012, contribute to a more robust and transparent system for monitoring water use. Their involvement ensures that measurement practices are consistently verified and aligned with regulatory requirements, thereby supporting effective enforcement and accountability.

More broadly, this accreditation programme represents a strong example of collaboration between the accreditation body and national regulatory authorities, including the Comisión Nacional del Agua. It demonstrates how coordinated institutional efforts can:

- Reinforce confidence in conformity assessment results
- Support the implementation of evidence-based public policies
- Enhance transparency and trust among stakeholders

Ultimately, this framework contributes significantly to the sustainable management and long-term preservation of vital water resources, ensuring that they remain available and equitably distributed for future generations.



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CASE STUDY 6

National Accreditation Board for Testing and Calibration Laboratories (NABL)

Sectors

- Telecom Sector

Type of Conformity Assessment

- Telecommunication and
Electronics Laboratories

SDG Addressed by the Case Study:

- **SDG 9:** Industry innovation and infrastructure

Background:

The International Telecommunication Union develops globally recognised standards across all domains of telecommunications and Information and Communication Technologies (ICTs), enabling interoperability, safety, and quality in international telecommunication services.

Recognition by ITU provides substantial strategic and operational advantages for laboratories in India, particularly those engaged in testing and certification of telecom and ICT products.



Key Benefits of ITU Recognition for Indian Laboratories

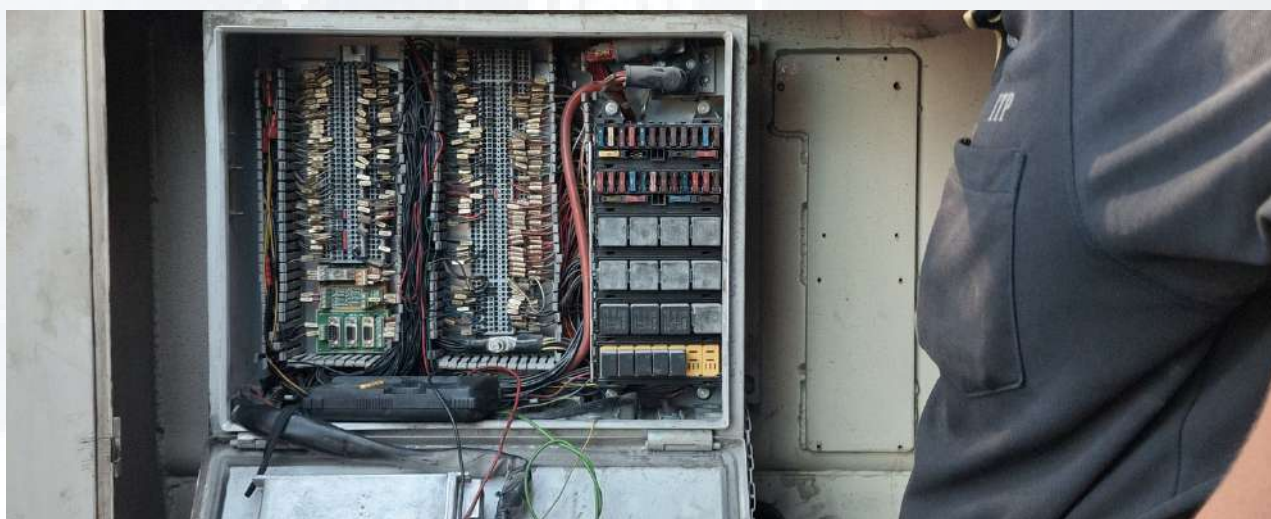
1. Quality assurance and enhanced credibility

Adoption of ITU standards strengthens the technical competence and reliability of laboratory services. This leads to higher customer trust and confidence in test results, both domestically and internationally.

2. Reduced costs and faster time-to-market

For manufacturers and exporters, using ITU-recognised and accredited laboratories significantly reduces or eliminates the need for re-testing in destination markets. This results in:

- Lower compliance and certification costs
- Shorter product approval cycles
- Improved ease of doing business



3. International collaboration and networking ITU recognition opens pathways for Indian laboratories to collaborate with global laboratories, industry bodies, and technology leaders.

These partnerships foster knowledge exchange, harmonisation of practices, and innovation.

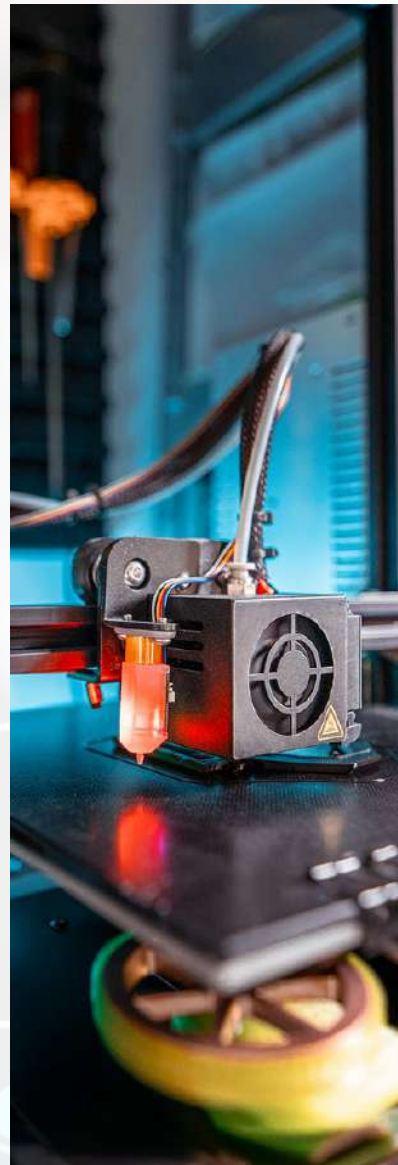
4. Access to research and development initiatives

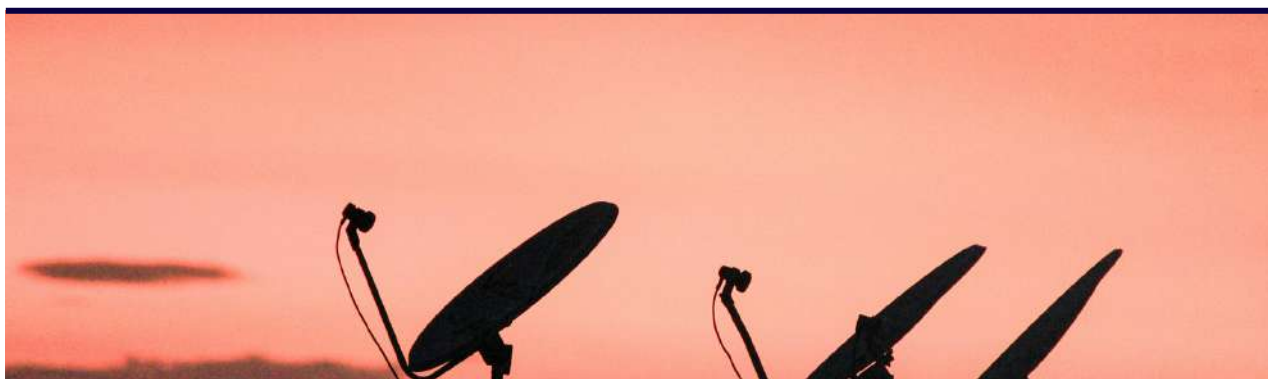
Laboratories gain exposure to ITU-led R&D programmes and technical studies, allowing them to stay aligned with evolving global standards and emerging technologies.

5. Capacity building and innovation ecosystem

6. Enhanced business opportunities: International recognition improves the competitive positioning of Indian laboratories by:

- Increasing customer confidence in their services
- Enabling participation in global tenders requiring independent, accredited testing
- Expanding access to international markets





Summary/Brief on the Initiative:

Impact of ITU-Aligned Accreditation in India

The initiative led by the National Accreditation Board for Testing and Calibration Laboratories to accredit laboratories in accordance with International Telecommunication Union standards has delivered several strategic benefits to the telecom and electronics testing ecosystem:

1. Competitive advantage in testing services-

Accreditation aligned with ITU standards has enabled Indian laboratories to offer internationally benchmarked testing services.

2. Increased participation in accreditation programmes-

The initiative has encouraged more electronics and telecommunication testing laboratories to seek NABL accreditation as per ITU standards. This expansion:

- Strengthens the national conformity assessment infrastructure
- Increases the availability of competent, accredited laboratories across the sector

3. Enhanced awareness and adoption of global standards-

Focused efforts have improved awareness among laboratories regarding ITU standards and their associated benefits, including:

- Improved customer trust and confidence
- Greater acceptance of test results
- Alignment with international best practices

4. Improved business opportunities and customer confidence

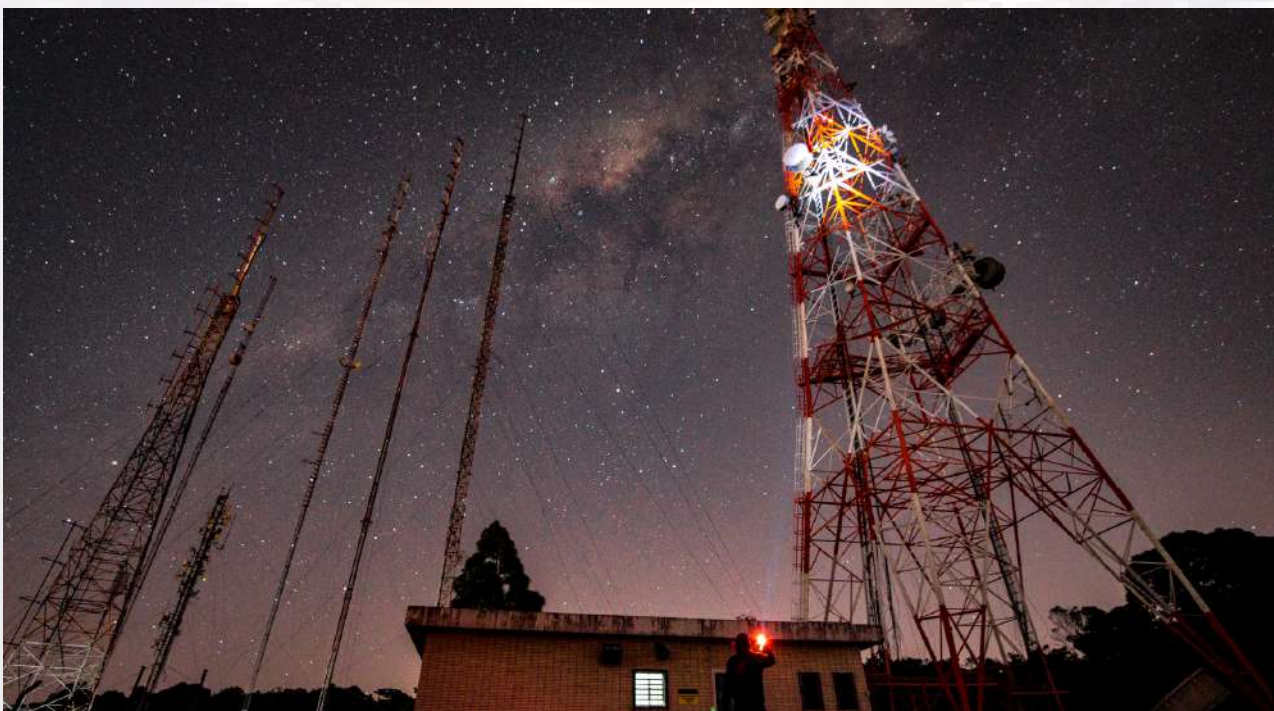
Laboratories accredited to ITU standards benefit from:

- Enhanced credibility in the marketplace
- Increased participation in national and international tenders
- Stronger client confidence in the accuracy and reliability of test results



Overall Impact

The integration of ITU standards into NABL accreditation has strengthened India's telecom testing ecosystem by improving quality, expanding capacity, and enhancing global recognition. This, in turn, supports innovation, facilitates trade, and reinforces India's role in the global ICT landscape.



Results and impacts post accreditation:

Recognition by the International Telecommunication Union has positioned laboratories in India as globally credible partners in the telecommunications and ICT ecosystem, delivering both technical and trade-related advantages:

1. International recognition and global integration

Indian laboratories recognised by ITU benefit from strong international credibility, enabling:

- Wider acceptance of test results across global markets
- Participation in international standardisation and technical discussions
- Contribution to emerging telecom technologies and regulatory frameworks

2. Inclusion in ITU Testing Laboratories Database (TLDB)

Listing in the ITU Testing Laboratories Database (TLDB) provides:

- Global visibility to accredited Indian laboratories
- Easier access for international manufacturers seeking trusted testing partners
- Enhanced opportunities for cross-border collaboration and service provision

3. Enhanced market access and export facilitation

ITU recognition supports Indian exporters by ensuring that products tested in recognised laboratories are more readily accepted internationally. This:

- Reduces technical barriers to trade
- Minimises re-testing requirements
- Accelerates market entry for telecom and ICT products

4. Strong export performance in telecom and electronics

India's telecom and electronics sector has demonstrated significant growth:

- FY 2024–25: Export value reached approximately USD 38.57 billion for electronics and telecom equipment
- Smartphone exports alone: Around USD 24 billion

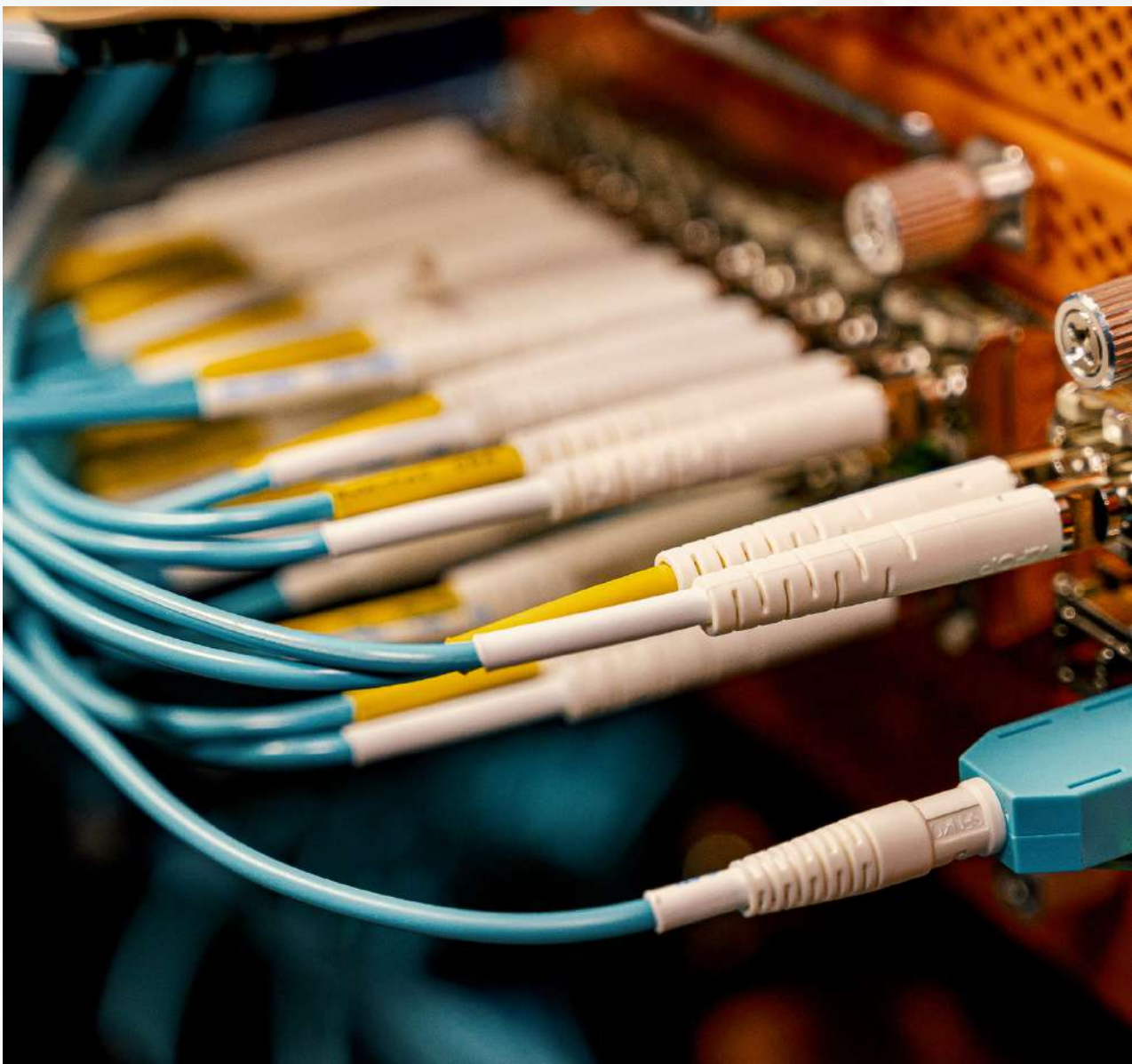
This growth reflects increasing global trust in Indian products, supported in part by robust testing, certification, and accreditation frameworks aligned with ITU standards.

5. Leadership in advanced ICT solutions

Indian ICT exporters are delivering end-to-end digital connectivity solutions tailored to both developing and developed markets, leveraging advanced technologies such as:

- 5G networks
- Optical fibre systems
- Broadband infrastructure
- Satellite communications
- Internet of Things (IoT)

These capabilities position India as a key global player in next-generation telecommunications.



CASE STUDY 7

The case study highlights the different sectors for promotion of trade based on experience.

Sri Lanka Accreditation Board (SLAB)

Sector

Food, Agriculture, Fisheries, Coconut Products and Healthcare

Type of Conformity Assessment

- Testing Laboratories (ISO/IEC 17025)
- Medical Laboratories (ISO 15189)
- Certification Bodies (ISO/IEC 17065, ISO/IEC 17021-1)
- Inspection Bodies (ISO/IEC 17020)

SDG Addressed

- **SDG 2** – Zero Hunger
- **SDG 3** – Good health and well-being
- **SDG 8** – Decent work and economic growth
- **SDG 9** – Industry, innovation and infrastructure
- **SDG 12** – Responsible consumption and production
- **SDG 16** – Peace, justice, and strong institutions
- **SDG 17** – Partnerships for the goals





Background

Prior to the strengthening of the national accreditation framework, exporters in Sri Lanka faced several trade-related challenges, including mandatory re-testing of products in importing countries, shipment delays, increased operational costs, and limited international acceptance of locally generated laboratory reports. These barriers reduced competitiveness and created inefficiencies in accessing global markets.

To address these issues, the Sri Lanka Accreditation Board was established under Act No. 32 of 2005. SLAB was mandated to provide internationally recognised accreditation services, thereby enhancing the credibility and acceptance of conformity assessment results produced within Sri Lanka. This institutional development marked a key step toward reducing technical barriers to trade and improving the global standing of Sri Lankan exports.

Initiation

The Sri Lanka Accreditation Board has implemented a comprehensive accreditation framework aligned with internationally recognised standards, including ISO/IEC 17025, ISO 15189, ISO/IEC 17065, and ISO/IEC 17021-1.

These programmes have focused on priority export and public health sectors such as tea, spices, coconut products, fisheries, and medical laboratories. In parallel, SLAB has strengthened the national quality infrastructure through capacity building, assessor training, and stakeholder awareness initiatives.



Specific Trade Benefits and Sectoral Impacts

1. Tea Export – Pesticide Residue & Quality Testing

Accredited laboratories conduct pesticide residue and quality testing for tea exports. The international acceptance of test reports has:

- Reduced the need for re-testing in importing countries
- Minimised shipment delays
- Lowered compliance costs
- Strengthened the global reputation of Ceylon Tea

2. Cinnamon & Spice Exports – Contaminant Testing

Accredited testing ensures compliance with international limits for aflatoxins, Salmonella, and heavy metals. This has:

- Prevented border rejections
- Improved access to premium markets such as the EU and USA
- Enhanced credibility of Sri Lankan spice exports

3. Fisheries Sector – EU Export Compliance

SLAB-accredited laboratories and inspection bodies support compliance with EU sanitary and HACCP requirements. As a result:

- Export eligibility to EU markets is maintained
- Shipment detentions and rejections are reduced
- Confidence in seafood quality and safety is strengthened



4. Coconut-Based Product Exports

Accredited laboratories and certification bodies verify microbiological safety and food safety management systems (e.g., ISO 22000). This has:

- Reduced rejection rates
- Increased buyer confidence in products such as desiccated coconut and coconut milk
- Supported consistent export performance

5. Medical Laboratories – Supporting Health Security

Accreditation to ISO 15189 ensures reliable and accurate diagnostic services. This contributes to:

- Strengthened public health systems
- Growth in medical tourism
- Increased international confidence in healthcare services in Sri Lanka

6. Organic Agriculture – Certification and Export Facilitation

Sri Lanka's growing organic sector—including tea, coconut products, spices, fruits, vegetables, and herbal products—requires strict compliance with international organic standards.

SLAB accredits product certification bodies under ISO/IEC 17065, ensuring:

- Technical competence and impartiality
- International acceptance of organic certifications
- Improved access to global organic markets



Overall Impact

Through internationally aligned accreditation programmes, SLAB has:

- Reduced technical barriers to trade
- Enhanced global recognition of Sri Lankan products and services
- Improved compliance with international regulatory requirements
- Strengthened competitiveness across key export sectors

In summary: accreditation has become a foundational enabler of trade facilitation, quality assurance, and international market access for Sri Lanka's priority industries.



Results and Impact

Accreditation provided by the Sri Lanka Accreditation Board has delivered wide-ranging trade and economic benefits:

- Improved international market acceptance under MRAs

Accreditation aligned with international standards has enabled greater acceptance of Sri Lankan test reports and certifications under Mutual Recognition Arrangements (MRAs), facilitating smoother market entry.

- Reduction in duplicate testing and trade costs

International recognition of accredited results has minimised the need for re-testing in importing countries, significantly lowering compliance costs.

- Faster customs clearance

Trusted and verifiable test reports have streamlined border procedures, reducing delays and improving supply chain efficiency.

- Increased SME participation in exports

Easier access to accredited testing and certification services has enabled more small and medium enterprises to meet export requirements and participate in global trade.

- Strengthened national quality infrastructure and regulatory credibility

Accreditation has reinforced confidence in Sri Lanka's conformity assessment system, supporting effective regulation and international trust.

- Promotion of sustainable agricultural practices

Accredited certification—particularly in organic and food safety domains—has encouraged adherence to sustainable and environmentally responsible production practices.



Overall Impact

Accreditation provided by SLAB has played a pivotal role in reducing technical barriers to trade in Sri Lanka. It has enhanced export competitiveness, strengthened food and health security, and contributed to sustainable economic development by ensuring that products and services meet globally recognised standards.

Contact

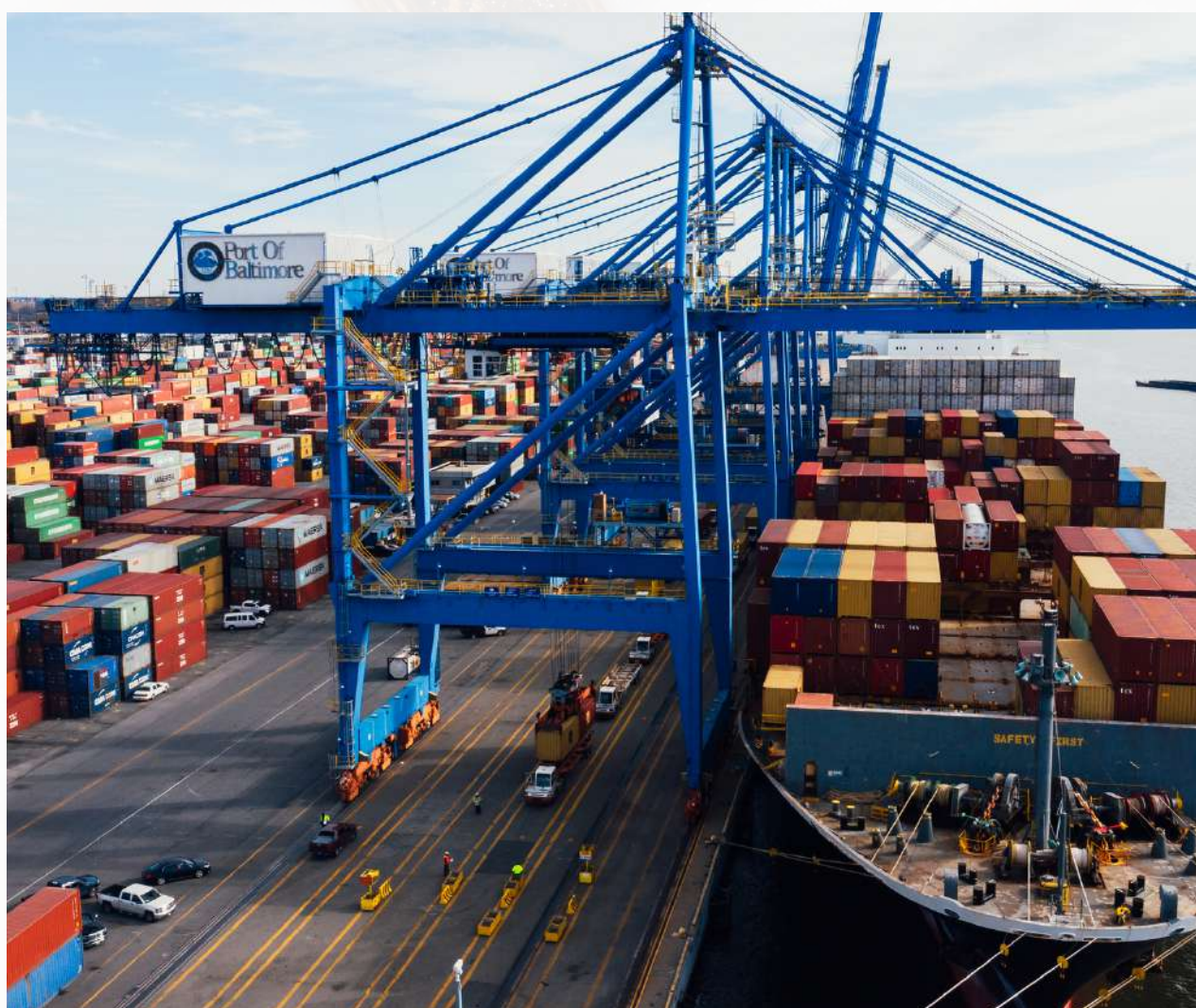
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ABOUT APAC



The accreditation bodies under Mutual Recognition with Asia Pacific Accreditation Cooperation (APAC) demonstrate the accreditation is cornerstone of collective efforts of APAC members to promote economic growth and international trade. 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](#).