JUNE 2023 • Vol. 9 • Issue 3
MONTHLY • Pages 64
₹ 200

RNI No.: DELENG/2015/67140; Published on: Every month; Posted at Lodi Road HPO, New Delhi on 9-10th of every month

THE AWARE CONSUMER

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WORLD ACCREDITATION DAY 2023

Accreditation: Supporting the Future of Global Trade

In the interests of Consumers

09 June 2023
#WAD2023

RESEARCH FEATURE
Decoding the International Accreditation Infrastructure

INTERVIEW

Mr. N. VENKATESWARAN
CEO, NABL

THE PRESCRIPTION
NABL Initiatives that Contribute to Public Health

PLUS ROUND UP • MY MARKET • OUT OF THE BOX

NATIONAL ACCREDITATION BOARD FOR TESTING AND CALIBRATION LABORATORIES

NABL

7th PTP/RMP CONCLAVE 2023

Date: 16th and 17th August 2023
Place: Kolkata, West Bengal, India

National Accreditation Board for Testing and Calibration Laboratories (NABL) - India, a Constituent Board of Quality Council of India is pleased to announce two days Proficiency Testing Providers (PTP) / Reference Material Producers (RMP) Conclave on 16th - 17th August 2023.

KEY OBJECTIVES OF THE CONCLAVE

UPDATE

National / International updates and development in accreditation of PTP and RMP

ABILITY

Showcase ability of conducting PT Scheme and Producing Reference Material in a competitive mode

PLATFORM

Platform for sharing views by PTPs / RMPs / Regulators and Laboratories (Testing, Calibration and Medical)

OPPORTUNITIES

Opportunities for PTPs / RMPs / Regulators and Laboratories (Testing, Calibration and Medical)

Who should attend

- Proficiency Testing Providers (PTP)-Accredited/ Applicant/Potential
- Reference Material Producers (RMP)-Accredited/ Applicant/Potential
- Users of PT schemes & Reference Materials
- Laboratories (Testing, Calibration and Medical)
- Quality professionals
- Manufacturers/ professionals from the Industry having in-house laboratory

For More Details Please Contact

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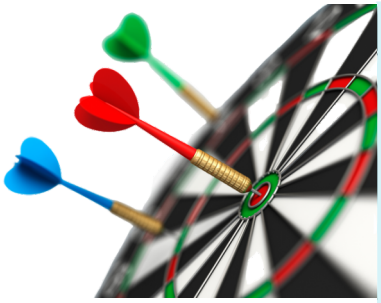

CLICK HERE TO REGISTER

Last date of registration
30th June 2023

Limited seats are available

Registration Fee

Category	Early Bird (till 31st May 2023)	Fee from 01st June 2023 onwords
Individual	Rs 3,000/- (GST 18% Rs 540) Total Fee = Rs 3,540	Rs 4,000/- (GST 18% Rs 720) Total Fee = Rs 4,720
Group registration	Rs 10,000/- (Upto 5 participants) (GST 18% Rs 1,800) Total Fee = Rs 11,800	Rs 15,000/- (Upto 5 participants) (GST 18% Rs 2,700) Total Fee = Rs 17,700
Foreign participant	USD 50	USD 60

- Conclave timing: 9 am to 5 pm (Both days)
- Attendance certificate will be issued upon attending this two-day Conclave
- Venue details and agenda will be shared with registered participants.

Tel No: 91-124-4679700 (30 Lines)

www.nabl-india.org

NABL HOUSE
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Gurugram - 122003, Haryana

VIEWPOINT

MESSAGE FROM PUBLISHER & EDITOR

Marking the Significance of World Accreditation Day: How it Benefits the Consumers?

9TH JUNE, 2023 marks World Accreditation Day - a global initiative established by ILAC (International Laboratory Accreditation Cooperation) and IAF (International Accreditation Forum) to promote the value of accreditation and raise awareness of the importance of accreditation-related activities.

Thanks to accreditation awareness, reliable, accurate and comparable test methods, analyses and results in the areas of quality, safety, health and the environment are possible. In a word: Accreditation reduces consumer risks, makes everyday life in many areas safer and therefore, bolsters consumer protection.

Standardisation is an essential basis for conformity assessment and accreditation. Technical standards are what make products and services, and the test methods that constitute the basis for them, comparable in the first place. Standardised and normalised requirements at all levels therefore increase the compatibility and availability of products and services. This pays off: in terms of quality, safety, production costs and ultimately also market prices – much to the benefit of consumers.

In India, voluntary accreditation services for conformity assessment bodies (CABs) are provided by NABL (National Accreditation Board for Testing and Calibration Laboratories), a constituent board of Quality Council of India (QCI). It provides third party attestation conveying a formal recognition of their technical competence, reliability and integrity.

CABs are organisations that check conformity and compliance with standards and regulations through testing, verification, inspection and calibration. NABL conducts a transparent and impartial evaluation of these bodies against internationally recognised standards and other requirements. It strives to provide quality and value driven services so as to strengthen our accreditation system and make it acceptable across the globe!

The conformity assessment process of CABs proves that a business or facility is well-equipped and capable of carrying out a specified task. It could relate to goods or services – be it the food we eat, the water we drink, the energy we use, the healthcare services we access along with other products used in everyday life. Therefore, accreditation becomes a seal of approval of the quality, reliability and safety as provided by a respected organisation (read: accreditation body). The end benefit is that consumers can have confidence in the calibration and test results, inspection reports and certifications provided!

You too can celebrate World Accreditation Day by visiting the NABL website www.nabl-india.org to locate the 6 cities where you can participate this year. Do join the events to learn about the benefits from accreditation.

Prof. Bejon Kumar Misra
Publisher & Editor
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PRAFULL D. SHETH
Editorial Board Member

DESKTALK

HIGHLIGHTING THE ROLE OF ACCREDITATION IN GLOBAL TRADE

THIS YEAR, THE theme of World Accreditation Day is centred on 'Accreditation: Supporting the Future of Global Trade'. It encompasses how accreditation supports a broad range of Sustainable Development Goals (SDGs), including SDG 1: No Poverty; SDG 2: Zero Hunger; SDG 3: Good Health and Well-Being; SDG 5: Gender Equality; SDG 8: Decent Work and Economic Growth; SDG 9: Industry, Innovation and Infrastructure; SDG 10: Reduced Inequalities; SDG 14: Life Below Water; and SDG 17: Partnerships for the Goals.

The focus is on showcasing the distinctive role played by accreditation and accredited conformity assessment activities in the ongoing global supply chain restructuring that continues to be a source of trade normalisation as firms seek new markets and investment opportunities (in the wake of the COVID-19 pandemic) to build resilient and flexible supply chains. This is likely to reinforce long-term growth in multilateral and bilateral trade relationships.

NABL's Mutual Recognition Arrangements (MRA) with ILAC and APAC will go a long way in reducing technical barriers to trade and facilitate acceptance of our test/calibration results in other MRA-signatory countries. It will also serve to promote uniformity in standards on the global platform.

Therefore, the NABL accreditation will stand the organisations in good stead by proving their competence to test in accordance with international standards. It will also make it easy for the businesses to operate globally by opening doors in international markets and giving them a competitive edge over others. This will facilitate trade and support sustainable development and growth in the country.

The end result is obviously enhanced customer confidence and satisfaction as it underpins safety and well-being in everyday life!

In fact, accreditation is considered a 'light touch' approach to regulation which benefits national authorities, businesses and consumers alike!

INSIDE

Did you know that a product that you buy in the market undergoes a number of tests before it actually reaches your hands?

Mr. N. VENKATESWARAN
CEO, NABL

Accreditation adds value to businesses, conformity assessment bodies and the regulators as well.

It is accreditation that imperceptibly supports the constant movement of capital, goods and services between countries to meet global demand while eliminating undue risks to the health and security of consumers and the environment.

THE AWARE CONSUMER
UNLOCKING CONSUMER POTENTIAL
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JUNE 2023 • Vol. 9 • Issue 3

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Published at:
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Printed at:
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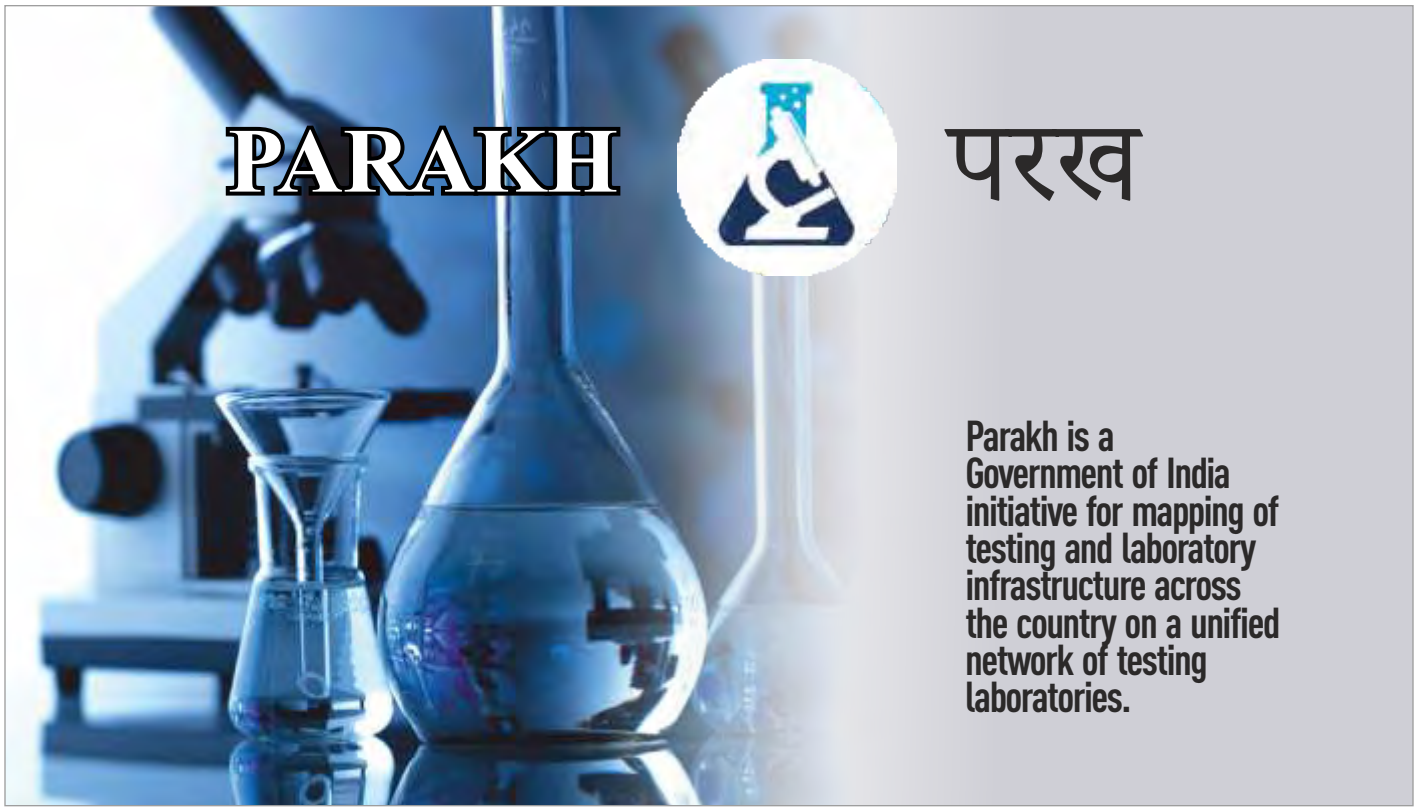
Total number of pages - 64, Including Covers

SHRI ANIL RELIA
FORMER CEO, NATIONAL ACCREDITATION BOARD FOR TESTING AND CALIBRATION LABORATORIES (NABL)

The journey of NABL in Medical Testing labs has been very dynamic which is evident from the number of laboratories accredited by NABL, and now with this constant effort towards increased awareness for Quality, the inflow of application for accreditation of labs is expected to increase at an exponential rate.

ROUNDUP



The PARAKH Umbrella of Accredited Laboratories

RECOGNISING THAT TESTING and certification are crucial for enhancing the competitiveness of Indian goods and services, the Government of India (under Department for Promotion of Industry and Internal Trade, Ministry of Commerce) launched PARAKH in June 2021 for mapping of testing and laboratory infrastructure across the country on a unified network. The web portal https://parakh.ncog.gov.in/incorporates all the

7,962 Laboratories

2,846 Products & Services

104,523 Test Methods

DATA BRIEFING

More than 4874 NABL accredited testing laboratories test a multitude of products ranging from PPE to Mobiles, Food, Water and construction materials

PARAKH has been developed with the support of Ministry of Electronics and Information Technology (MEITY), Bhaskaracharya National Institute of Space Applications and Geo Informatics, Gujarat (BISAG) and various line ministries, departments and boards of the government, including NABL.

NABL accredited and government recognised laboratories in the country on a Geographic Information System (GIS).

This is an interactive and user-friendly system for finding laboratories and tests based on various parameters. People can search labs for a particular product, standard, test method in a state or a city and also find nearby labs on PARAKH. The portal even enables finding the scope of accreditation and test methods of a laboratory. It allows for adding new private laboratories and booking a test through it.

This will help in both enhancing the ease of doing business and reduce compliance burden of the labs. It is hailed as the first step towards strengthening the National Laboratories Quality Infrastructure in the country.

Benchmarking Survey of Laboratory Practices

ROCHE DIAGNOSTICS INDIA partnered with the Consortium of Accredited Healthcare Organisations (CAHO) to redefine laboratory practices in India by initiating a benchmarking study and conducting an upskilling programme for laboratories in the country.

The benchmarking of diagnostics practices was done not just at individual lab level but also at an international level to understand where Indian laboratories stand in terms of quality, productivity, costs, patient experience and clinical value generated which are considered as the pillars of excellent patient care.

The results of the benchmarking survey were presented at the Annual CAHOCON 2023 as part of a whitepaper highlighting 30 key indicators that define quality and effective laboratory outcomes. These benchmarks allows clinical chemistry laboratories to assess their performance on a wide range of quality, speed and cost indicators, helping them to identify areas for improvement and maintain competitive advantage. Therefore, they can improve care in terms of operational and business indicators.

Narendra Varde, Managing Director, Roche Diagnostics India and Neighbouring Markets, commented, “The Lab Insights benchmarking survey gives a perfect opportunity for evidence-based learning that focuses on four major parameters – improvement in lab management, upskilling bench scientists, providing access to global best practices and facilitating labs in India to align with global standards”.

The Lab Insights Benchmarking survey was started in 2011 and as of date, has 3,700+ participating labs (includes 97 Indian labs) across 17 countries across APAC. It is one of the largest benchmarking survey of its kind in the world.

NABL at CAHOCON 2023

NABL PARTICIPATED AS a knowledge partner in the 7th International Conference of Consortium of Accredited Healthcare Organisations 'CAHOCON 2023' held on 14th to 16th April 2023 at Hyderabad. The theme of the conference was 'Leadership is the Key to Quality'.

It was organised by Consortium of Accredited Healthcare Organisations (CAHO), a not-for-profit body that aims to enable quality and patient safety initiatives in Indian healthcare. CAHO members include healthcare institutions, diagnostic centres and quality professionals and works to promote patient safety through training for healthcare professionals.

The main event was inaugurated by Dr Ravi P Singh, Secretary General, Quality Council of India (QCI) which witnessed enthusiastic participation from more than 1500 participants from hospitals, laboratories, medical students, nurses and other healthcare industry related professionals from across India, 15 other countries and even representatives of two international accreditation bodies.

Mr. Pankaj Johri, Director, NABL delivered a talk on 'NABL - Unveiling The New ISO 15189:2022 - What Is It For Our Labs'. The participants were briefed on the new standard and about the transition plan of ISO 15189:2022 and way forward for laboratories and NABL empanelled assessors.

Dr. Vijay Agarwal, President of CAHO categorically stated that, “Accreditation is the beginning of the journey for quality healthcare!”

Mr. Pankaj Johri
Director, NABL

> In his address, Dr. Ravi Singh announced that in order to encourage and promote quality, QCI will rate and rank 1000 NABL accredited hospitals in India. It is likely to begin in July this year. The few top-ranked hospitals will be accorded status centres of excellence.

Dr. Ravi Singh
Secretary General, QCI

'CAHO LABCON 2023' was also conducted on 14th April exclusively for the medical testing laboratories. It was attended by more than 200 participants and the theme was 'Ensuring Quality and Addressing Challenges in the Spectrum of Lab Diagnosis'.

The NABL team was represented by Mr. Pankaj Johri (Director), Ms. S Gayathri (Joint Director), Dr. Bhumi Rajya Guru (Deputy Director), Mr. Chandrakant Solanki (Deputy Director), Mr. Hari Babu (Deputy Director) and Mr. Prashant Paschal (Assistant Director). They sensitised the stakeholders on the accreditation activities and the benefits of NABL accreditation.

The team had an interactive session which received numerous queries from different sectors like medical laboratories, government and private hospitals, stakeholders and the healthcare providers.

How Safe are Imported Toys for Our Children?

QUALITY COUNCIL OF India (QCI) conducted a testing survey of the toys available in the markets of Delhi and NCR in 2019. As many as 121 different varieties were procured and submitted to NABL accredited laboratories to carry out all the tests on these toys as per the Indian standards.

According to the survey report released at the end of December 2019, 66.9% of imported toys failed the test. It further revealed that 30% of plastic toys did not meet the safety standards of admissible levels of phthalate, heavy metals, etc. while as many as 80% of plastic toys failed on mechanical and physical safety properties. In the case of soft toys, 45% samples failed on the admissible levels of phthalates; 75% of the electric toys failed on mechanical properties. It should be noted that 85% of the toys sold are imported from China, followed by Sri Lanka, Malaysia, Germany, Hongkong and the USA.

Dr. Ravi Singh, Secretary-General, QCI, warned that toys that fail mechanical testing can damage the skin of children. He further pointed out that if the toys have any harmful chemicals, they can cause cancer. Giving an example of a toy tent, he said that kids go inside the tent and play. If these tents fail in the flammability test, it can cause fire immediately.

"Acting on our report, the DGFT (Directorate General of Foreign Trade) changed its notification. DGFT has decided that every consignment, which is coming in India on the Indian ports, samples from each will be picked up and port authorities will send the sample to NABL accredited lab. Until and unless, the lab gives test report passing all the samples, those consignments will not go to the market. If they fail, they will be either destroyed or will be sent back to the manufacturers. Ports have been asked by the DGFT to ensure compliance so that toys do not hurt the health and safety of kids in India."

– Dr. Ravi P Singh
Secretary-General, QCI

ELIMINATING SUBSTANDARD MEDICAL DEVICES IN INDIA

TO FILL THE regulatory vacuum in quality certification space for medical devices in the country, the Association of Indian Medical Device Industry (AIMED) in collaboration with the Quality Council of India (QCI) and the National Accreditation Board for Certification Bodies (NABCB) introduced a voluntary quality certification scheme for medical devices.

NABCB rolled out a voluntary quality certification scheme for Level I and Level II medical devices - viz. ICMED 9000 and ICMED 13485. The Board provides accreditation to the conformity assessment bodies by assessing their competence in terms of required human resources and other requirements. These in turn undertake verification and assessment of quality management system of medical device manufacturers of Class A and Class B category and may, on as required basis, be called upon to render assistance for regulation of Class C and D medical devices also.

This was designed to eliminate trading of substandard products or devices of doubtful origins, a widespread and injurious phenomenon in the Indian market. The scheme also assists procurement agencies to tackle challenges related to counterfeit products and fake certification. Therefore, it boosts patient safety and provides enhanced consumer protection along with much needed product credentials to manufacturers for instilling confidence among buyers.

In March this year, The Ministry of Health, Government of India directed the state governments to set up their own laboratories for testing and evaluation of medical devices. It also specified that all medical device testing laboratories should be accredited to the National Accreditation Body for Testing and Calibration Laboratories (NABL).

The aim is to push medical device manufacturing to fill the existing gaps as India is currently importing 80% of its medical device requirements, especially from China. It will help create an enabling environment while also ensuring availability of better medical devices for patient care and safety.

In India, medical devices are a category of almost 5,000 products including electronics equipment, implants, consumables and disposables, IVD reagents and surgical instruments. They are tested as per the Central Drug Standard Control Organisation (CDSCO) norms notified in the Medical Devices Rules, 2017 (last amended in 2022). It should be noted that different categories of medical devices may require different kinds of testing infrastructure.

MR. ROHIT K SINGH
Secretary,
Department of
Consumer Affairs, GoI

On the occasion of World Metrology Day on 20th May to commemorate the signing of the Metre Convention in 1875, Mr. Rohit K Singh, Secretary, Department of Consumer Affairs, GoI stated, "In line with GoI's aggressive push for Digital India, DCA is currently developing a blockchain-based solution to ensure a tamper proof system of traceability and validation of issued certificates. Most of the interface with industry is being digitalised through the National Single Window System (NSWS). Adequate human capacities in digital metrology are being developed at the Indian Institute of Legal Metrology (IILM) in Ranchi, in partnership with IIT BHU, Varanasi.

With its digital prowess, India has the potential to become the global supplier to meet the unprecedented demand for digital metrology and remote calibrations. With that, India can promise both assurance of quality as well as quantity, not only to the millions of domestic consumers but also to the rapidly expanding export market."

World Metrology Day

May 20 2023

Theme:

Measurements supporting the global food system

What's In It For Me?

How does accreditation help the common man as he goes about his normal routine? What is the role of accreditation in the daily walks of life? The answer is: More than we could ever imagine!

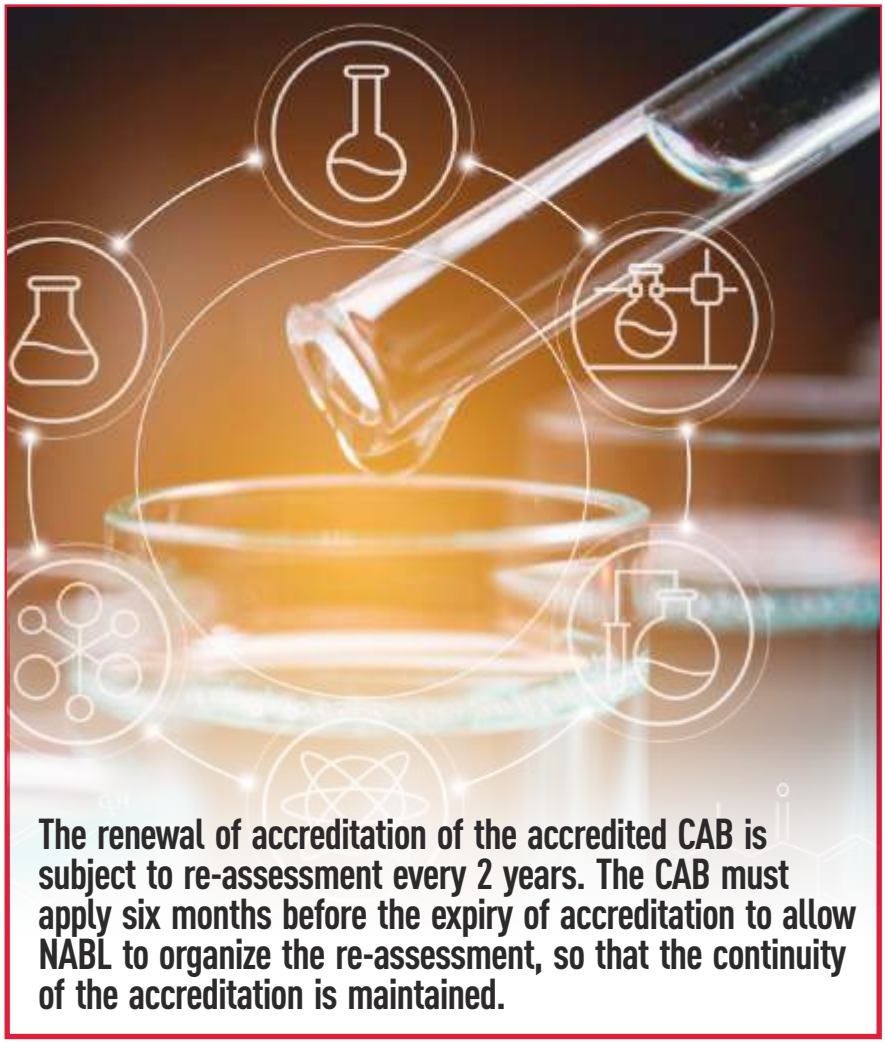
Accreditation fosters a culture of quality and safety! It increases consumer confidence!

THE HIGHEST COMMON denominator among consumers when purchasing a product or service is obviously quality! All that we want is that what he have paid for should function or deliver as expected. It should also be safe and not harm us in any manner, neither right now nor in the long run.

Think about it:

- When you buy a pair of prescription spectacles, you will expect that it will provide precision in vision correction and enable you to see clearly.
- When you buy a mask, you will count on it protecting you from the virus and other pathogens in the atmosphere and people around you.
- When you buy solar panels, you will again expect that the accompanying reports and certificates about the performance, durability, safety and environment-friendliness can be trusted readily.
- When you enrol your child in a school, you will want the institution to equip him/her with the basic knowledge and skills to build a successful life tomorrow.
- When you buy a toy for the same child, you will obviously not want it to harm him/her in any manner whatsoever.
- When you make an investment, you will look for the surety that your money will be safe, secure and grow in value.
- When you go to a hospital, you will require that the staff and facilities can nurse you back to good health in a safe environment.
- And when the doctor asks for some diagnostic tests, you will look for the guarantee that they are accurate.

The list can go on and on.



The renewal of accreditation of the accredited CAB is subject to re-assessment every 2 years. The CAB must apply six months before the expiry of accreditation to allow NABL to organize the re-assessment, so that the continuity of the accreditation is maintained.

Accreditation Serves its Purpose

Accreditation fulfills its intended purpose by serving as a mark of assurance across various sectors. It plays a crucial role in ensuring that production processes, operations, and other aspects adhere to performance, safety, quality, health, environmental, and other standards. The accreditation guarantees the reliability, safety, and legality of the products or services being examined. Meeting these fundamental expectations requires rigorous evaluation.

And how do we know that the said laboratories are performing as expected with due diligence?

This is where accreditation comes into the picture by providing formal recognition of competent CABs. It involves an independent examination and careful assessment of such conformity assessment bodies by qualified external peer reviewers to confirm their technical competence and impartiality to perform tests, measures, certifications, inspections, verifications, etc. This accreditation is in accordance with the regulatory requirements and internationally recognised norms and standards, and using scientifically reproducible methods.

Therefore, the accreditation shows that the test results, inspection reports, certifications, etc. of the said organisation can be relied on.

Accreditation is proof that the laboratory or certifier is:

- **impartial and independent from the manufacturer or service provider**
- **competent to do its job in a sustainable manner**

It is clear that accreditation bodes well for the consumer - who is at the

When a business has been assessed to an industry recognised standard by an accredited body, you can rest assured that you will get exactly what you are looking for!

end of the demand-supply chain - in many ways:

- **Build confidence –** Accreditation builds confidence in the consumers about the products and services they purchase, by providing a third-party assurance that they meet certain quality and safety standards.
- **Help make an informed choice -** Accreditation provides a ready means for customers to find reliable testing/calibration reports – in every field from food to forensics - issued by accredited laboratories. This enables them to make informed choices about the products and services they buy and leads to better purchasing decisions.
- **Increase purchase options –** As more and more products and services get tested by CABs, it will increase the choice available in the market. Consumers can pick and choice from a range of options which will, in turn, make the prices more competitive too.
- **Promote consumer protection** - Accreditation plays an important role in consumer protection by ensuring that their rights and expectations are not violated in any manner.

This does not mean that something that is tested by an accredited body will never harm anyone. There is always some scope for things to go wrong unexpectedly. However, the chances of malfunctioning or defects are reduced to the bare minimum while the value to the consumer multiplies manifold!

Reminder: Consumers should look for the NABL symbol as it signifies that a laboratory has been accredited by NABL. It is typically displayed on test reports issued by accredited laboratories and serves as a visual indicator to customers and stakeholders that the laboratory has undergone a rigorous assessment process and has met the required standards for accurate and reliable testing.

Conclusion

Accreditation gives consumers the confidence that the goods and services they buy and use are credible and trustworthy. Therefore, when looking for any product or service – be it food, an electronic item, a house, a vehicle, a school or even any computer course - always seek out businesses that have been tested by NABL accredited centres. Only this can give the assurance of performance as it has been accredited by professionals in that field.

"Accreditation supports the needs of people as it verifies that products are safe, and quality expectations are met. Accredited measurement ensures that consumers are protected, while health and social care systems are delivered by competent professionals." – WAD2021 Brochure

DECODING THE INTERNATIONAL ACCREDITATION INFRASTRUCTURE

Did you know that a product that you buy in the market undergoes a number of tests before it actually reaches your hands? These checks are not confined to the laboratory or our country alone; in fact, there are international organisations that mandate and monitor accreditation of testing agencies to ensure that all products and services around us are of top quality and safe to use.

ILAC and IAF are constantly working together and coordinating their efforts to enhance the accreditation and conformity assessment worldwide

ALL KINDS OF industries – be it food, electrical, construction, science, chemical, clinical, forensic science, environmental or other sectors – routinely require laboratory testing or calibration services to support their products. This involves examining, evaluating and measuring every aspect like product design, process or installation to gauge its conformity with general or specified requirements.

For instance, there is inspection of boilers and pressure equipment used in the workplace, cranes and passenger ropeways, offshore structures for oil and gas exploration, mechanical equipment, inspection of meat, dairy products and other food items, bio-security and border control inspections. This plays a crucial role in ensuring the operational safety of many products and services that the consumers use in their daily lives.

Accreditation forms the basis for evaluating the competence of these laboratories to perform specific types of testing, measurement and calibration before granting formal recognition. This involves assessing various factors that affect the lab's ability to produce precise, accurate test and calibration data – like technical competence of staff, validity and appropriateness of test methods, traceability of measurements and calibrations to national standards, calibration and maintenance of test equipment, the testing environment, sampling and handling of test items and quality assurance of test and calibration data. This way accreditation ensures that the laboratory will produce consistently reliable and impartial results.

Therefore, a strong and robust quality infrastructure is required to ensure that the food, water, toys, gadgets, medical services, energy, etc. that we use should work in the appropriate and safe manner. It comprises of a range of testing, calibration and other conformity assessment bodies at the primary level. These are subject to oversight by an authoritative body that also accredits the facilities – like the National Accreditation Board for Testing and Calibration Laboratories (NABL) which is a constituent board of Quality Council of India (QCI). The top level is international accreditation bodies like the International Laboratory Accreditation Cooperation (ILAC) and the International Accreditation Forum (IAF).

International Laboratory Accreditation Cooperation (ILAC)

ILAC is the international organisation for accreditation bodies operating in accordance with ISO/IEC 17011 and involved in the accreditation of conformity assessment bodies. It develops and harmonises accreditation practices for testing laboratories, medical testing laboratories, calibration laboratories, inspection bodies, proficiency testing providers and reference material producers.

The primary purpose of ILAC is to establish an international arrangement between member accreditation bodies based on peer evaluation and mutual acceptance.

It was first started as a conference - held in October 1977 in Copenhagen, Denmark - with the aim of developing international cooperation for facilitating trade by promotion of the acceptance of accredited test and calibration results. In 1996, ILAC became a formal cooperation with a charter to establish a network of mutual recognition agreements (MRAs) among accreditation bodies.

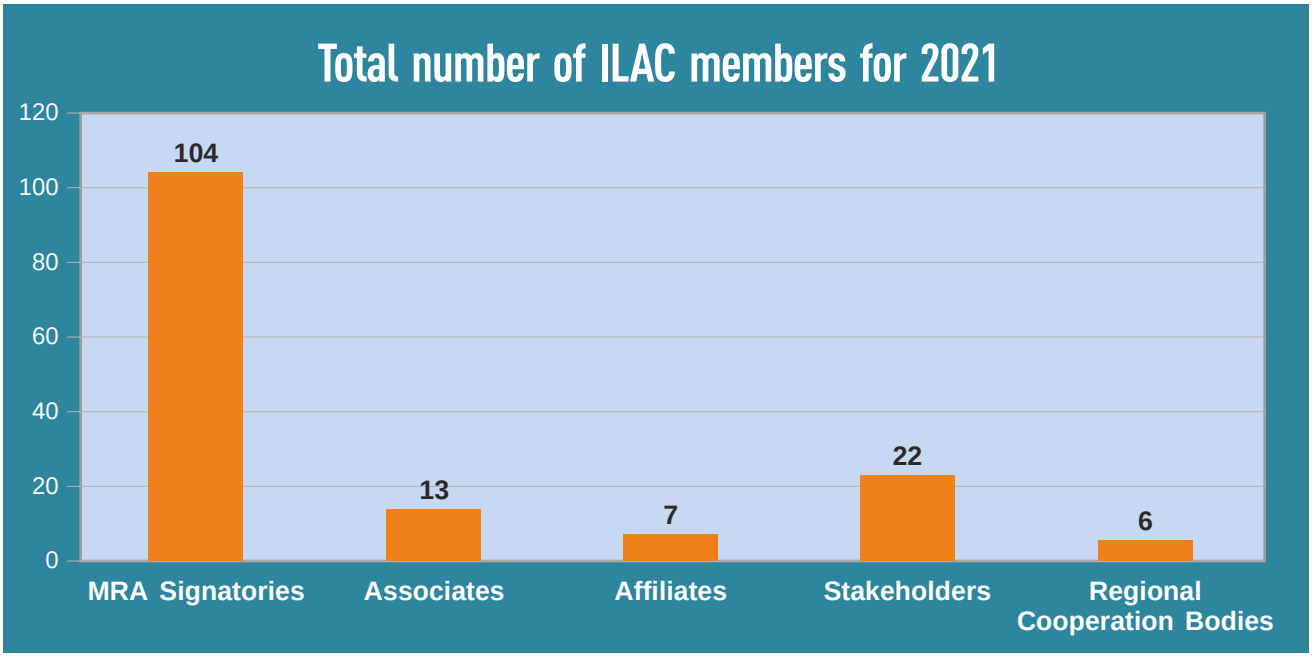
In 2000, the 36 ILAC full members consisting of laboratory accreditation bodies from 28 economies worldwide (including India), signed the ILAC Mutual Recognition Arrangement (ILAC MRA) in Washington DC, to promote the acceptance of technical test and calibration data for exported goods. These signatories have been peer evaluated in accordance with ISO/IEC 17011 to demonstrate their competence.

The ILAC MRA for calibration and testing laboratories came into effect on 31st January, 2001. It was extended in October 2012 to include the accreditation of inspection bodies, in May 2019 to include the accreditation of proficiency testing providers and in May 2020 for the accreditation of reference material producers.

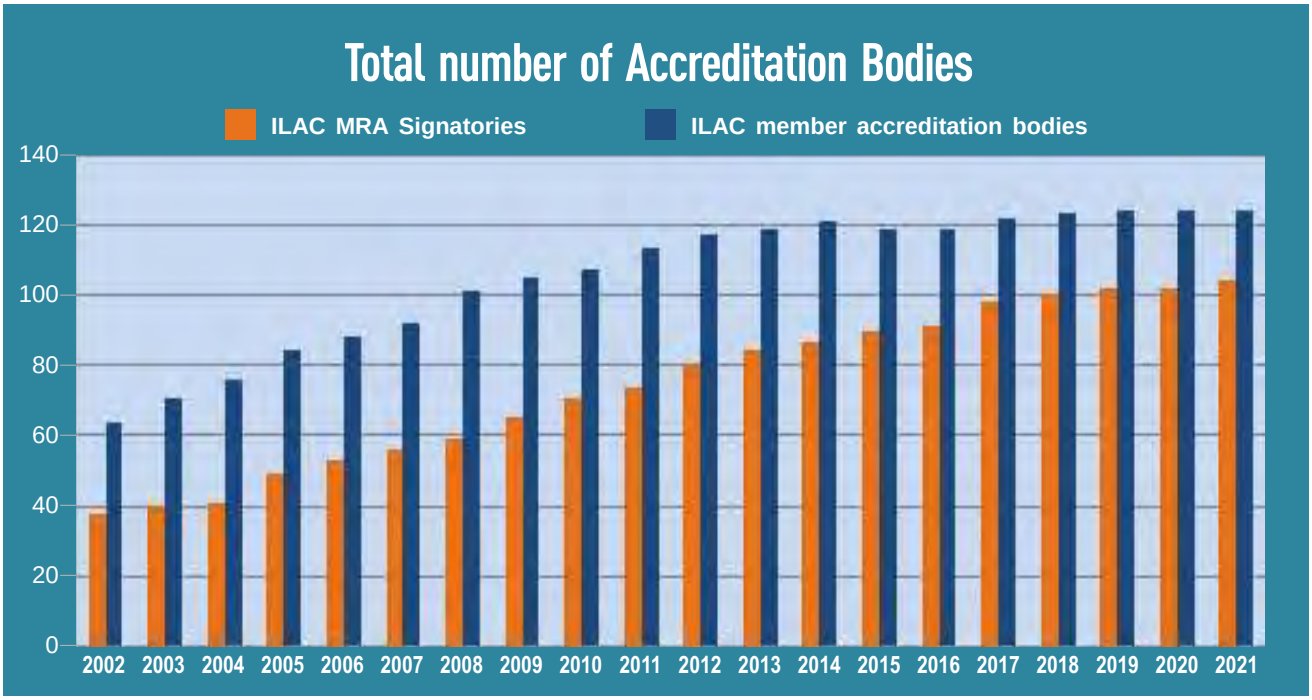
The MRA supports the provision of local or national services, such as safe food and clean drinking water, energy, delivering health and social care, and maintaining an unpolluted environment. It also enhances the acceptance of products across national borders.

The accreditation bodies are responsible for maintaining a list of laboratories, inspection bodies, proficiency testing providers and reference material producers that they have accredited

ILAC itself does not assess or accredit any laboratories, inspection bodies, etc.



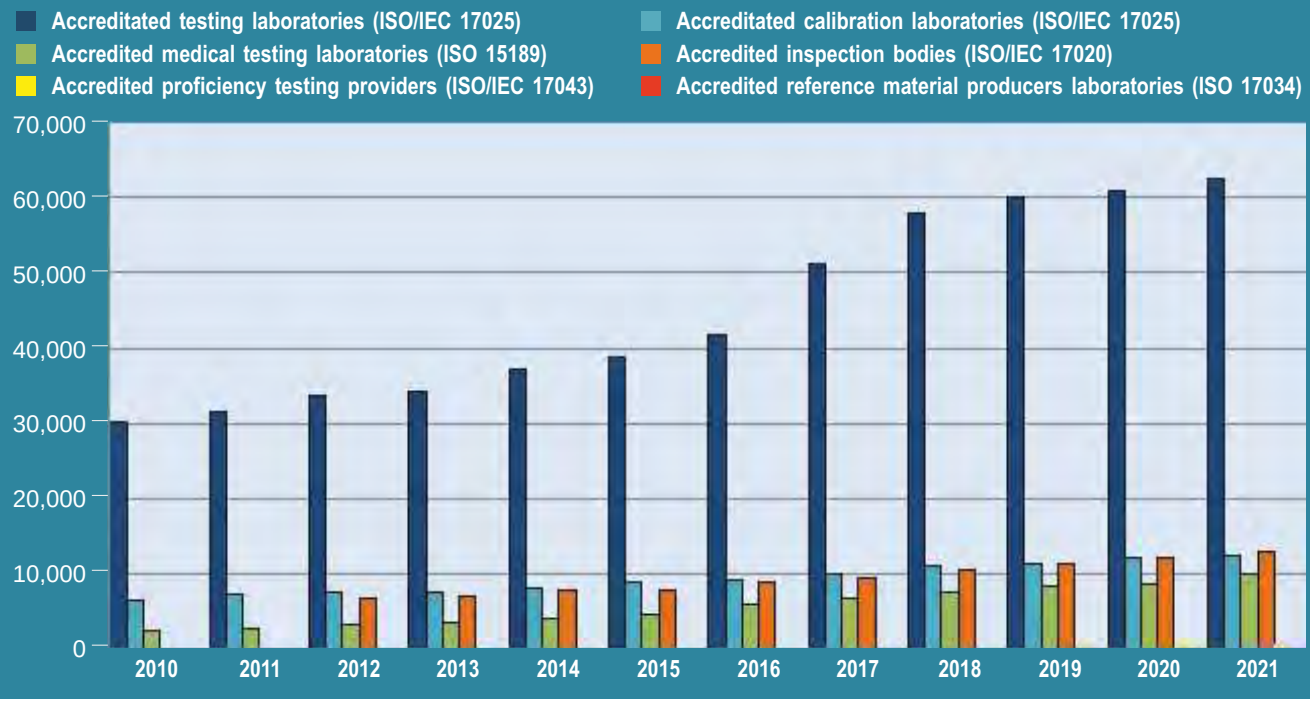
Associate and Affiliate members are those working towards achieving their ILAC MRA signatory status. (The Affiliate category has been discontinued from 31st December, 2021)



109 accreditation bodies from over 116 economies have signed the ILAC MRA (as of end of 2021)

All accreditation bodies that are members of ILAC are not necessarily signatories to the ILAC MRA. Hence, the results from their accredited CABs may not be recognised in other economies. The list of all ILAC members (by economy) is available on the membership page of the ILAC website https://ilac.org/. The ILAC MRA Signatory Search provides the contact details for all the accreditation bodies; it is searchable by organisation name, economy and accreditation scope.

Total number of Accredited Conformity Assessment Bodies (CABs)



Accreditation bodies that are full members of ILAC i.e., signatories to the ILAC MRA, can use the 'Combined ILAC MRA Mark' (ILAC MRA Mark in combination with the logo) for accreditation activities covered by the scope of their ILAC MRA signatory status

ILAC promotes the increased use and acceptance of accredited calibration, testing, medical testing and inspection data and results, proficiency testing programs and reference materials internationally. Industries, governments, regulators and consumers are encouraged to use and accept results from accredited conformity assessment bodies, including in other economies.

As part of its international approach, ILAC provides advice and assistance to organisations from developing economies that are in the process of developing their own accreditation systems

ILAC is committed to developing closer links and strategic partnerships with key organisations operating in its sphere of work. It liaises and cooperates with many international bodies to achieve shared objectives. These partnerships – with World Bank, IAF, International Organization for Standardization (ISO), International Network on Quality Infrastructure (INetQI), United Nations Industrial Development Organization (UNIDO), World Anti-Doping Agency (WADA), etc. - act as a means of advancing common interests and strengthening the international accreditation network.

Additionally, ILAC also maintains informal partnerships with World Health Organisation, World Trade Organisation, European Commission, Asia-Pacific Economic Cooperation, etc.

International Accreditation Forum (IAF)

The International Accreditation Forum (IAF) is a worldwide association of accreditation bodies and other bodies interested in conformity assessment in the fields of management systems, products, processes, services, personnel, validation and verification and other similar programmes of conformity assessment.

The primary function is to develop a single worldwide program of conformity assessment which reduces risks

97 national accreditation bodies are members of IAF including National Accreditation Board for Certification Bodies (NABCB) from India. In addition to these, there are 27 association members and 6 regional accreditation groups as well.

for businesses and their customers by assuring them that accredited certificates and validation/verification statements can be relied upon.

Accreditation bodies and regional accreditation group members are subject to a stringent evaluation of their operations by a peer evaluation team which ensures that they comply fully with both international standards and IAF requirements.

The IAF Multilateral Recognition Agreement (MLA) assures the member accreditation bodies that equivalent certification and validation/verification bodies in other economies operate to the same standard as in their economy. All IAF MLA signatories recognise the equivalence of other signatories' accreditations to their own.

83 of the 97 national accreditation bodies (including NABCB) are AB MLA signatories. The full list is available on the IAF website (https://iaf.nu/).

The IAF MLA Mark can be used by accreditation bodies to demonstrate their status as a signatory to the IAF MLA. Certification and validation/verification bodies accredited by IAF MLA signatories can also use the IAF MLA Mark in combination with the accreditation symbol on their certificates or statements.

Businesses seeking certification or validation/verification will be able to see at a glance if the certification or validation/verification body issuing the certificate or statement is accredited by an IAF MLA signatory. The certification or validation/verification body must include an indication as to which activity the accreditation is related.

IAF has partnerships and agreements with various international organisations - like FAMI-QS, Foundation FSSC, GLOBALG.A.P. and the International Personnel Certification Association - for the inclusion of private sector schemes in the IAF MLA. It is also one of the founding members of the International Network for Quality Infrastructure (INetQI), which brings together international organisations active in promoting and implementing quality infrastructure activities (metrology, accreditation, standardisation and conformity assessment) as tools for sustainable economic development.

World Accreditation Day

ILAC and IAF together initiated the global celebration of World Accreditation Day (WAD) on 9th June in 2008. Since then, they have explored relevant and timely themes ranging from supporting safe food and clean drinking water to global acceptance to global trade. This year, a virtual event is being organised by ILAC and IAF on 9th June.

Conclusion

Conformity assessment is not limited to a single purpose or an individual client. Accredited conformity assessment supports a much wider eco-system of health, safety, fitness and quality regardless of industry or country along with frictionless trade across international borders.

The use of accreditation is expanding into new sectors today. There is also growing reliance by both businesses and regulators. What was a voluntary activity with export orientation, has now been embraced by many countries as a mandatory activity in many regulated areas based on the benefits it yields to governments in meeting their responsibilities and safeguarding the public.

ILAC and IAF together with ISO and the Independent International Organization for Certification (IIOC) have established a Public Sector Assurance website (www.publicsectorassurance.org) to showcase different real global examples of how accredited conformity assessment is used around the world by central governments, local governments and regulators to support public policy efforts and deliver other positive benefits. It features a range of case studies - from assisting forensic science in the UK to effective voluntary programmes in the US to improving the delivery of food safety in Australia to protecting consumers in the safety of products in the Gulf Coast countries to supporting sustainable animal health in Botswana - that illustrate the value of accreditation to government officials and regulators in delivering results in key policy areas as well as the tangible benefits of conformity assessment for the public sector.

India Ranked Among Top Five Accreditation Systems In The World

India's national accreditation system under the Quality Council of India (QCI) has been ranked 5th in the world in the recent Global Quality Infrastructure Index (GQII) 2021.

THE GLOBAL QUALITY Infrastructure Index (GQII) ranks the 184 economies in the world on the basis of their quality infrastructure (QI). The 2021 survey results (released in December 2022) show that India's overall QI system ranking continues to be in the Top 10 at the 10th position. Individually, our national accreditation system (under the Quality Council of India) is ranked 5th in the world, while the standardisation system (under Bureau of Indian Standards) stands 9th and the metrology system (under NPL-CSIR) is placed at the 21st position. (see Figure 1)

The GQII measures the relative development of the quality infrastructure of countries across the globe. A formula calculates a score for each country based on its position in the sub-rankings for metrology, standards and accreditation. The database allows interested persons to compare the quality infrastructure of different countries worldwide.

The GQII rankings are published and presented post-facto for each year based on the data collected till the end of that year. The 2021 rankings are based on data till end of December 2021, collected and analysed through 2022.

Jaxay Shah
Chairperson, QCI

"This is the sign of a New India in the Amrit Kaal with a quality first approach. India's accreditation system is the youngest among the three QI pillars in India, and we have jumped to global fifth within a year in these rankings. QCI, under the leadership of Hon. Prime Minister Sh. Narendra Modi ji and Hon. Commerce & Industry Minister Sh. Piyush Goyal ji, is committed to make 'Made in India' a globally trusted brand on the foundations of quality and credibility. Time is ripe to provide more support to our businesses to pursue their quality journey in mission mode."

Quality Infrastructure refers to the international system of metrology, standardisation, accreditation and quality-related services (testing, calibration, inspection, verification, training and awareness building) that create confidence in international trade and contribute to the protection of consumers and the environment.

FIGURE 1: GQII 2021: Global Ranking and Subrankings by QI area (184 Economies)

Economy Name	Economy Code	GQII Rank	GQII Scores	Rank Metrology	Rank Standardization	Rank Accreditation
Germany	DEU	1	0,996	2	2	1
China	CHN	2	0,990	3	1	3
United States	USA	3	0,987	1	8	2
United Kingdom	GBR	4	0,982	4	4	6
Japan	JPN	5	0,976	5	3	12
France	FRA	6	0,973	7	6	11
Korea, Republic of	KOR	7	0,962	6	7	17
Italy	ITA	8	0,957	15	5	4
Spain	ESP	9	0,949	13	10	7
India	**IND**	**10**	**0,932**	**21**	**9**	**5**
Poland	POL	11	0,927	19	15	7
Switzerland	CHE	12	0,924	14	12	21
Brazil	BRA	13	0,924	11	20	18
Australia	AUS	14	0,923	9	18	22
Czech Republic	CZE	15	0,923	18	13	14
Turkey	TUR	16	0,921	16	25	10
Netherlands	NLD	17	0,914	20	11	15
Mexico	MEX	18	0,913	10	42	9
Canada	CAN	19	0,912	8	24	26
South Africa	ZAF	20	0,909	12	27	19

According to the report, the top 25 QI systems are mainly located in Europe, North America and Asia-Pacific with some exceptions like India, Brazil, Australia, Turkey, Mexico and South Africa.

What is notable here is that the current GQII contains a data comparison with the previous year for the first time which reveals the effects of the COVID-19 pandemic on QI development. It shows that QI service provision and use continued to grow even after the onset of the pandemic. (see Figure 2)

The GQII report also illustrates the links between Quality Infrastructure and other development indicators such as economic performance, competitiveness, economic complexity, export performance and transparency. (see Figure 3)

The government is working in the direction of making India's accreditation systems 'Number One' in the world!

- Ravi Singh, Secretary General, QCI

A Take on the Ground Reality

The picture is not as rosy as depicted by the GQII rankings. There is a severe lacunae in laboratory medicine services and in pathology education in medical schools in India.

FIGURE 2:

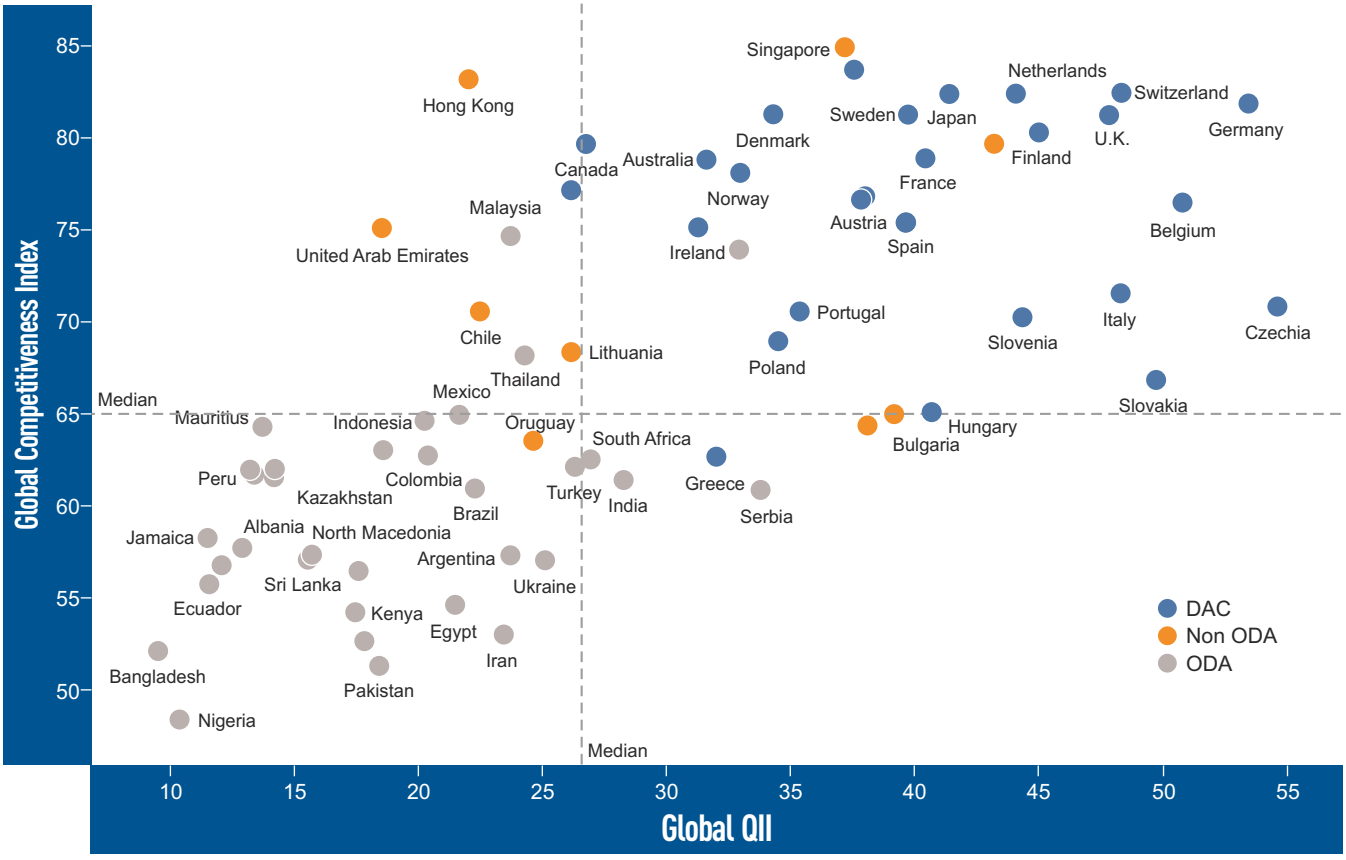
India's 2021 Ranking vis-a-vis 2020

India's	GQII 2020	GQII 2021
GQII Rank	10	10
GQII Score	95.6	0.932
Rank Metrology	19	21
Rank Standardization	7	9
Rank Accreditation	9	5

Researchers from PGIMER-Chandigarh, Government Medical College Baramati and Manipal Hospital Yeshwanthpur Bangalore conducted a study and the results were published just a year ago. The report revealed the biggest health loophole in India – there are only 198 NABL accredited labs in 555 government medical colleges! Most of the medical colleges are not NABL accredited or are partly accredited (i.e., accredited in some sections but not all).

That's not all, laboratories of most government medical college hospitals do not offer important diagnostic tests, most of which are routine in the West. This detracts from

FIGURE 3: Global Quality Infrastructure Index vs Global Competitiveness Index



the service as well as the educational function of the college.

The Lancet has dubbed pathology and laboratory medicine (PALM) as the Cinderella of health systems!

The categories of accredited labs found in the 555 government and private colleges across India include:

- Molecular Pathology - 193
- Microbiology - 54
- Biochemistry - 24
- Haematology and Immunohematology – 19
- Histopathology – 13
- Cytopathology – 11
- Flow Cytometry – 7
- Clinical Pathology - 11
- Cytogenetics – 3
- Genetics – 1

The study further stated that the considerably high numbers of molecular pathology and microbiology laboratories is because of the COVID pandemic as the thrust was on having facilities that meet the standards to ensure reliable SARS-CoV-2 reports. In fact, it reveals that the advent of the pandemic resulted in many colleges having to set up laboratories and accredit themselves in molecular pathology, but this is largely restricted to SARS-CoV-2 testing. Other investigations are still lacking, as are cytogenetics laboratories.

"Before the COVID pandemic, there were probably just about 10 to 20 NABL microbiology or molecular pathology labs across the country..... NABL accreditations are about achieving the minimum safety standards. Although this cannot be done overnight, having relevant data can at least help the government make relevant policies to address the issue." - Dr Sanjay A. Pai, Manipal Hospital, Yeshwanthpur, one of the authors of the study

Quality infrastructure (QI) is the technical backbone for international trade, with metrology, standardisation, accreditation and conformity assessment services providing reliability and trust between trading partners. In addition, QI services are increasingly relevant for the health sector and sustainable development.

Alas, many medical schools in India do not offer specialty medical services, such as medical and surgical oncology, radiation oncology, medical gastroenterology, etc. The researchers point out that the absence not only forces patients to shell out money at private ones, but medical students also lose out on the opportunity to gain the requisite lab-related skills. Most of them graduate without having any experience with basic diagnostic tests.

A search for the words 'medical college' or 'institute of' (terms which medical colleges usually use in their names) on the National Accreditation Board for Hospitals & Healthcare Providers (NABH) website yielded just 28 hits (September 21, 2021).

The study finally emphasises that accreditation should be made mandatory in all the laboratories in the medical schools so as to raise the standards of medical care and teaching. However, it cannot be denied that this will require additional finances as well as entail much more work – these are among the primary reasons that many institutes dither on doing this.

Conclusion

Being one of the world's top five accreditation systems will help pave the way for more collaborations to further improve the quality and resilience of the testing infrastructure in our country. However, the medical colleges need to offer specialised diagnostic services if they are to achieve the targets of universal health care as well as turn out competent doctors.

WORLD ACCREDITATION DAY

ACCREDITATION:
SUPPORTING THE FUTURE OF GLOBAL TRADE

09 June 2023

#WAD2023

ON JUNE 9TH, 2023, the world will celebrate World Accreditation Day (WAD 2023), a global initiative established by the International Laboratory Accreditation Cooperation (ILAC) and the International Accreditation Forum (IAF). This significant event aims to promote the value of accreditation in various sectors. This year's theme, 'Accreditation: Supporting the Future of Global Trade', highlights the crucial role that accreditation and accredited conformity assessment activities play in facilitating international trade and fostering resilient supply chains.

Importance of International Trade

International trade serves as the backbone of the global economy, enabling companies to engage in the purchase and sale of goods and services across borders. It allows nations to expand their markets and access a wider range of products and services that may not be readily available domestically. Consumer goods, raw materials, food and machinery are among the commodities actively traded in the international marketplace.

Benefits of International Trade

International trade fosters competition, leading to more competitive pricing and affordable products for consumers. By seeking new markets and investment opportunities, firms contribute to the ongoing restructuring of global supply chains, enhancing trade normalisation. As a result, multilateral and bilateral trade relationships are reinforced, promoting long-term growth and strengthening the value of mutual recognition arrangements, such as those facilitated by ILAC and IAF.

Accreditation and the Future of Global Trade

Accreditation and accredited conformity assessment activities serve as vital pillars in supporting the evolution and resilience of global supply chains. Through rigorous assessment processes, accreditation ensures that businesses meet internationally recognised standards for quality, safety and performance. It instils confidence in consumers and facilitates trade by verifying that products and services meet the necessary requirements.

This year's World Accreditation Day theme underscores how accreditation actively contributes to building resilient and flexible supply chains. By ensuring compliance with international standards, accreditation facilitates smoother trade flows, reduces barriers and strengthens market access for businesses across the globe.

The Role of Accreditation

Accreditation helps businesses to build trust, increase their competitiveness and reduce risk. It provides an objective and independent assessment of a company's processes and operations, ensuring that they meet established standards. Accreditation can also help businesses to gain a competitive advantage in the marketplace by providing a recognised seal of quality that differentiates them from their competitors.

Accreditation also helps to promote the safety and well-being of consumers. Accredited conformity

assessment activities, such as testing, inspection and certification, provide assurance that products and services are safe and reliable. They also help to ensure that food and other products meet the necessary regulatory requirements and are safe for consumption.

Linking Accreditation to Sustainable Development Goals

The theme of World Accreditation Day 2023 also encompasses a wide array of Sustainable Development Goals (SDGs) established by the United Nations. Accreditation directly supports SDGs such as No Poverty (SDG 1), Zero Hunger (SDG 2), Good Health and Well-Being (SDG 3), Gender Equality (SDG 5), Decent Work and Economic Growth (SDG 8), Industry, Innovation and Infrastructure (SDG 9), Reduced Inequalities (SDG 10), Life Below Water (SDG 14), and Partnerships for the Goals (SDG 17). By promoting accreditation, we can advance progress in these areas and contribute to a sustainable and inclusive future.

Accreditation will help in ensuring that products and services meet international standards. Accreditation also promotes good health and well-being by ensuring that medical products and services meet the necessary quality and safety standards.

Conclusion

As World Accreditation Day 2023 approaches, National Accreditation Board for Testing and Calibration Laboratories (NABL) recognises the critical role that accreditation plays in supporting the future of global trade. By ensuring compliance with international standards and fostering resilient supply chains, accreditation empowers businesses to navigate the complexities of the international marketplace. Through this year's theme, we highlight the profound impact of accreditation on various Sustainable Development Goals, reinforcing the importance of partnerships and collaboration in achieving a prosperous and sustainable future.

NABL is a full member and a signatory (since 2000) to International Laboratory Accreditation Cooperation (ILAC) as well as Asia Pacific Accreditation Cooperation (APAC) Mutual Recognition Arrangements (MRA), which is based on peer evaluation. Such international arrangements facilitate acceptance of test/calibration results between countries which MRA partners represent.

Every year NABL is celebrating WAD in different regions of India. The same way this year NABL is celebrating the WAD 2023. The event will take place in six different locations across India:

1. Ahmedabad
2. Bangalore
3. Delhi
4. Kolkata
5. Lucknow
6. Mumbai

To participate in World Accreditation Day celebrations, please register at the following link or by scanning the QR code:

There is no registration fee for the participation.

Link: https://forms.office.com/r/NLYnqH98fG

Let us join hands in promoting the value of accreditation and its pivotal role in shaping the future of global trade!

GOVERNMENT PERSPECTIVE

NABL

QUALITY COUNCIL® OF INDIA
Creating an Ecosystem for Quality

NABL accreditation is the benchmark of quality and reliability!

Accreditation of Testing and Calibration Facilities in India

QUALITY COUNCIL OF India (QCI) is the national body for accreditation in our country that has crafted a mechanism for independent third-party assessment of products, services and processes. NABL (National Accreditation Board for Testing and Calibration Laboratories) was established in 1982 with an accreditation system in accordance with ISO/IEC 17011 – 'Conformity Assessment – Requirements for Accreditation Bodies Accrediting Conformity Assessment Bodies'. In 2016, it was merged with QCI as a constituent board.

NABL defines accreditation as "the third-party attestation related to a conformity assessment body conveying formal demonstration of its competence, impartiality and consistent operation in performing specific conformity assessment activities."

The primary objective of NABL is to provide the government, industry associations and industry in general with a scheme of independent assessment of the technical competence of testing of conformity assessment bodies (CABs) for accreditation. Accordingly, it provides voluntary accreditation services to:

- Testing Laboratories in accordance with ISO/IEC 17025 'General Requirements for the Competence of Testing and Calibration Laboratories'
- Calibration Laboratories in accordance with ISO/IEC 17025 'General Requirements for the Competence of Testing and Calibration Laboratories'
- Medical Testing Laboratories in accordance with ISO 15189 'Medical Laboratories - Requirements for Quality and Competence'
- Proficiency Testing Providers (PTP) in accordance with ISO/IEC 17043 'Conformity Assessment — General Requirements for Proficiency Testing'

> "NABL offers accreditation services in a non-discriminatory manner. These services are accessible to all testing including medical and calibration laboratories, proficiency testing providers and reference material producers in India and other countries in the region, regardless of the size of the applicant CAB or its membership of any association or group or number of CABs already accredited by NABL."

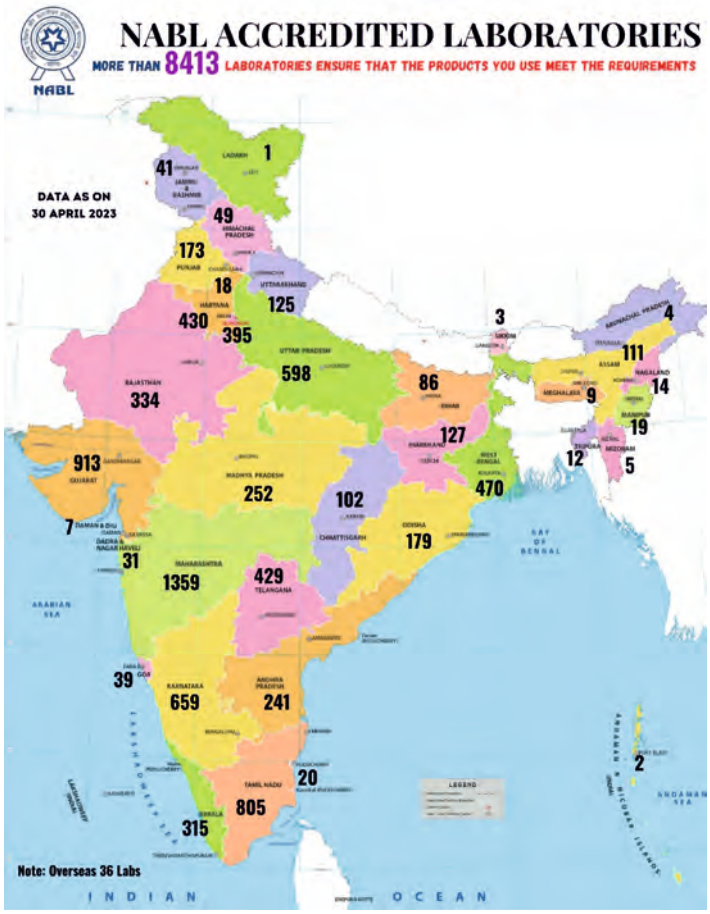
Prof. S. Ayyappan
Chairman, NABL

- Reference Material Producers (RMP) in accordance with ISO 17034 'General Requirements for the Competence of Reference Material Producers'

Total Number of NABL Accredited CABs as on 30.04.2023

Fields	Total (India)	International	Total Accredited Labs
Testing	4857	23	4880
Calibration	1099	10	1109
Medical	2344	3	2347
PTP	59	0	59
RMP	18	0	18
Grand Total	**8377**	**36**	**8413**

The Board is maintaining linkages with international bodies like International Laboratory Accreditation Cooperation (ILAC) and Asia Pacific Accreditation Cooperation (APAC). It is Mutual Recognition



Arrangements (MRA) signatory to both these international bodies since 2000 which is based on mutual evaluation. Accordingly, test reports issued by an NABL accredited laboratory are considered equivalent to those issued by ILAC/APAC MRA partners.

NABL strives to strengthen the accreditation system accepted across the globe by providing high quality, value-driven services, fostering APAC/ILAC MRA, empanelling competent assessors, creating awareness among the stakeholders, initiating new programs supporting accreditation activities and pursuing organisational excellence. It aims to be the world's leading accreditation body and to enhance stakeholders' confidence in its services.

The Accreditation Process

NABL provides accreditation in specific fields and disciplines to:

- CABs undertaking any sort of testing (including medical), calibration, proficiency testing and reference material production in the specified fields
- Private or government CABs
- Small operations to large multi-field CABs
- Site facilities and mobile laboratories

NABL's scope for accreditation extends to all major fields of science and engineering such as:

- **Testing Laboratories:** Biological, Chemical, Mechanical, Electrical, Electronics, Fluid-Flow, Forensic, Diagnostic Radiology QA Testing, Non-Destructive Testing, Photometry, Radiological and Software & IT system Testing
- **Calibration Laboratories:** Electro-Technical, Mechanical, Fluid Flow, Thermal, Optical Equipment and Radiological Measurements
- **Medical Laboratories:** Clinical Biochemistry, Clinical Pathology, Haematology, Microbiology & Infectious Disease Serology, Histopathology, Cytopathology, Cytogenetics, Flow Cytometry and Molecular Testing
- **Proficiency Testing:** Testing, Calibration, Medical and Inspection
- **Reference Material Producers:** Chemical Composition, Biological and Clinical Properties, Physical Properties, Engineering Properties and Miscellaneous Properties

CABs seeking NABL accreditation can apply on the NABL web portal https://nabl-india.org/. The CABs that wish to apply for accreditation should be legally identifiable and appropriately registered. They can be a part of a big organisation or an independent entity. Multi-disciplinary CABs have to apply separately for each relevant discipline.

Procedure for Accreditation by NABL

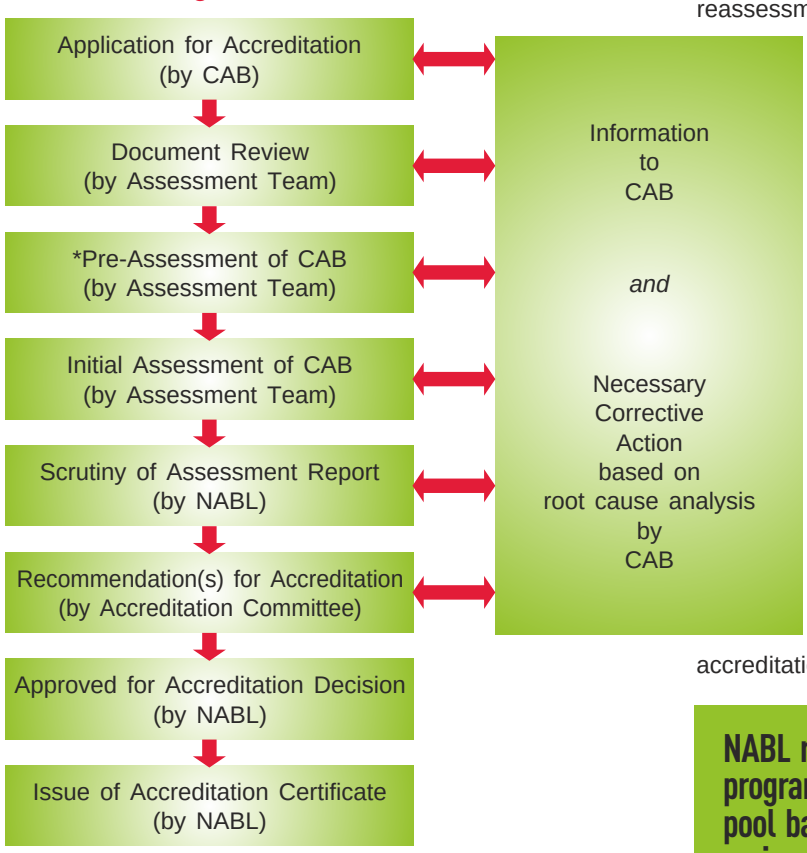
NABL publishes a series of important documents on its website to guide and inform applicant laboratories about the specific criteria, processes and other technical information that will help them in getting the accreditation. It also provides updates about the available business opportunities in different sectors.

Facility has been given to applicant labs in the portal to interact with NABL

Once approved, NABL will issue an Accreditation Certificate that includes the CAB's scope of accreditation. It will bear the 'Combined ILAC MRA Mark' (the ILAC MRA Mark in combination with the ILAC MRA signatory logo) for accreditation activities covered by the scope of its ILAC MRA signatory status.

Contact NABL to check the validity of a certificate or report. It can also confirm the CAB's accreditation status and scope of accreditation. If you receive a counterfeit certificate or fraudulent report, contact NABL immediately.

Flow Diagram of Accreditation Process



*Optional for laboratories (Testing/Calibration/Medical Testing)

The accredited CABs can issue certificates/reports that include the results as well as information on the standards and methods used. They are entitled to use the Accredited CAB Combined ILAC MRA Mark as well.

NABL accreditation is not a one-time phenomenon. The accreditation is valid for a period of 2 years and NABL conducts periodical surveillance of the CABs on annual basis. Renewal of accreditation is subject to reassessment.

Accredited CABs have to apply for renewal at least 6 months before the expiry of the validity of accreditation to allow NABL to organise the reassessment, so that the continuity of the accreditation is maintained.

In fact, NABL works extensively with various regulators and government agencies to pursue quality standards at all levels which ensures quality of products, processes and systems not only for domestic consumption but also for trade across borders.

In India, NABL accreditation is usually the precursor to various government/regulator/ statutory body recognitions.

Moreover, NABL conducts integrated assessments with food, agricultural products and export regulators - such as Food Safety and Standards Authority of India (FSSAI), Agricultural and Processed Food Products Export Development Authority and Export Inspection Council (EIC) respectively. This simplifies the process of recognition, as the laboratory can get accredited and recognised by the regulator in one combined assessment instead of the separate multiple assessments which are usually needed.

Activities

NABL is constantly organising awareness and training programs for different kinds of laboratories and other testing service providers to sensitise them about the need for accreditation, develop their technical capabilities as well as address the issues they face during routine testing activities. They are also updated with the recent developments in accreditation and other requirements.

NABL regularly conducts assessor's training programs to enhance the empanelled assessor pool based on the expertise required in the various areas of conformity assessment

How to Find an Accredited Lab?

The NABL website (https://nabl-india.org/) provides a list of all the accredited laboratories, proficiency testing providers and reference material producers. You can click on the specific tab to search for accredited facilities by:

- Name of the laboratory
- Accreditation certificate number
- Standard
- Name of product
- Category
- Parameter

Conclusion

Despite being voluntary, NABL accreditation has gained strong momentum and wide acceptance amongst regulators and end users. Many government agencies and ministries have recognised the importance of NABL's credible accreditation schemes that are developed against internationally recognised standards. The results from accredited laboratories are used extensively by regulators for the public benefit in the provision of services that promote an unpolluted environment, safe food, clean water, energy, health and social care services.

INTERVIEW

Q As you know the theme this year is "Accreditation: Supporting the Future of Global Trade" Please share with our readers what are the key objectives of the theme and how NABL can play a role on behalf of our country.

As you are aware that accreditation supports the global trade and contributes significantly in India's economy. Accreditation supports the economy of India by enhancing consumer confidence, facilitating international trade, fostering innovation and competitiveness, boosting industry efficiency, supporting regulatory compliance, and strengthening service sectors. These benefits collectively contribute to economic growth, job creation, and improved standards of living.

- **Facilitating International Trade:** Accreditation provides a reliable mechanism for demonstrating technical competence and compliance with international standards and relevant technical regulations. When Indian products being exported are tested in NABL accredited laboratories, it becomes easier to access global markets by virtue of NABL being signatory to international mutual recognition arrangements like ILAC and APAC.
- **Fostering Innovation and Competitiveness:** By adhering to international accreditation standards, companies are encouraged to enhance the quality of their processes, products and services to meet global benchmarks. This drive for excellence leads to improved competitiveness, increased productivity and the ability to offer innovative solutions. These factors contribute to economic growth and help India position itself as a global player in various industries.
- **Supporting Regulatory Compliance:** Accredited conformity assessment bodies are required to comply with regulatory requirements applicable to them in their respective areas. By obtaining NABL accreditation, organisations demonstrate their commitment to deliver quality and support the regulatory framework. This compliance reduces the risk of legal issues, penalties, and market exclusions.
- **Strengthening Service Sectors:** Accreditation is not limited to manufacturing industries alone; it also extends to service sectors such as healthcare, tourism, education, and IT. Accreditation in these sectors ensures quality standards, safety, and customer satisfaction.

Q Can you please tell us about the priorities of NABL today and how the common consumers can gain from such initiatives?

Our priority is to strengthen the accreditation system accepted across the globe by providing high quality, value driven services, fostering APAC/ILAC MRA, creating awareness among the stakeholders, initiating new programs supporting accreditation activities and pursuing organisational excellence and providing accreditation to all the laboratories present in India. This will lead to the development of a robust service industry which will inturn increase consumer confidence, greater demand for services and meet global benchmarks. The growth of the service sector significantly contributes to the overall GDP and employment generation.

Mr. N VENKATESWARAN

was appointed as CEO of NABL on 31st May, 2019. He has about 25 years of working experience with 9 years in the industry and 16 years in NABL. He had initiated the concept of Laboratory Conclave and PTP/RMP Conclave in India. He has conducted a number of NABL audits as Lead Assessor; he is an APAC Evaluator and has participated in evaluation of Accreditation Bodies in other economies.

The Aware Consumer magazine educates the readers about sustainability, fair trade practices, ethical considerations, enabling people to become more responsible consumers.

Q Please share some of your success stories with us since you took over as the CEO of NABL.

My journey as CEO, NABL has been very eventful. The aim of our service is to create a positive impact in the life of the common man. As NABL does not directly deal with end users of laboratory services, it becomes all the more necessary that we thoroughly ensure the competence of the laboratories to the relevant standards. In the last four years, several challenges were thrown up by the COVID pandemic and the restrictions that were placed to combat its menace. Despite these challenges, some of the achievements that I want to share with you are:

- Growth in accreditation from 5335 labs to 8386 labs.
- Digitalisation of the entire process of accreditation from application to issue of accreditation certificate. Example, digitalisation of all accreditation records enabled seamless working of NABL during COVID pandemic.
- Enhanced the strength of NABL through induction and regularisation of NABL staff.
- Introduction of micro and mini categories which gave affordability to small labs.
- Maintaining the Mutual Recognition Arrangements at international levels [Asia Pacific Accreditation Co-operation (APAC) and International Laboratory Co-operation (ILAC)] in the peer evaluation without any non-conformity.
- Accreditation to more than 1800 laboratories for SARS CoV-2 testing in the shortest possible time, which increased the testing capacity across the country during the COVID pandemic.
- Proficiency Testing based recognition for medical labs working at the grass root level for increasing accessibility of citizens to quality healthcare in every part of the country.
- Proficiency Testing based recognition scheme for drinking water testing laboratories (under the Ministry of Jal Shakti) in all districts and blocks of the country.
- Started accreditation in new areas like QA agencies for diagnostic radiology X-ray equipment, software & IT system testing, medical devices calibration, medical imaging.
- Product Based Accreditation for enabling one stop accredited testing laboratories for products under regulation.
- Accreditation for testing food, drugs, PPE, oxygen concentrators, etc. was given to laboratories despite challenges during COVID pandemic so that the testing infrastructure was made available for such essential items.
- Initiated and conducted about 24 lab forums, stakeholders meeting (27 meetings with head of laboratories), TechSympo (14 programs with technical managers of accredited labs), Qualmacon (5 programs with quality managers of accredited laboratories).

Q We have observed, you always supported our magazine for many years, What do you feel good about the magazine?

The Aware Consumer magazine often provide readers with valuable information about products, services, trends and benefits of accreditation. They offer insights and advice on making informed consumer choices, helping readers make decisions that align with their values and interests. It also educates the readers about sustainability, fair trade practices, ethical considerations, enabling people to become more responsible consumers.

The magazine often includes articles, interviews, and features that inspire readers. These cover topics such as personal development, healthy living, challenges faced by consumers etc. that provide readers with ideas and perspectives to enhance their lives.

Q Can you also share some of your thoughts on how we can further improve our magazine in terms of content and reach?

The magazine can foster a sense of community among like-minded individuals who are interested in similar topics. You may provide a platform for readers to engage with one another, share experiences, and exchange recommendations and advice. The topics should be enablers in conscious choices of quality in all types of products and services that a consumer looks for.

Accreditation supports the economy of India by enhancing consumer confidence, facilitating international trade, fostering innovation and competitiveness, boosting industry efficiency, supporting regulatory compliance, and strengthening service sectors.

Q As you will agree, every consumer must look for the NABL logo while seeking tests from laboratories. Any suggestions on how to further improve awareness of the benefits of NABL accredited Labs and why we should look for the NABL logo?

NABL logo is for the exclusive use of NABL only. NABL symbol in test reports helps build trust and confidence among consumers by ensuring that products and services meet specific quality and safety standards and the Laboratory has provided valid traceable results through impartial, competent and consistent operations. NABL symbol on an accredited laboratory test report is a symbol of trust and it shows that the laboratory has been assessed as per the international standard for that specific scope and found competent by NABL.

NOTE: NABL Symbol mentions the accreditation certificate number positioned below the NABL logo.

Q Do you have any dedicated Helpline Number or website to facilitate consumers to reach the nearest NABL Accredited Labs in the neighbourhood?

Yes, to facilitate the consumers to reach the NABL accredited laboratories which are nearest to their location there are two ways to do that:

1. Visit our website https://nabl-india.org and click on “Laboratory Search” tab and select “Accredited Laboratories”. Search for accredited laboratories by mentioning the country, state and district. From our database, all the laboratories accredited in that particular area will be displayed which will have the name and number of the laboratory's contact person and the address of the laboratory.
2. They can also send an email at info@nabl.qcin.org and/or call our information cell at 0124-4679868 (9:00 am to 5:30 pm Mon-Fri) to enquire about the status of the accredited laboratories.

Q On the occasion of World Accreditation Day 2023, what events do you plan to organize in the country to engage with our readers to build awareness of Quality Labs?

NABL is celebrating the World Accreditation day 2023 on 9th June in 6 cities across the country. These cities are: Ahmedabad, Bengaluru, Kolkata, Lucknow, Mumbai and New Delhi.

This will provide an opportunity to interact directly with the various stakeholders such as consumers laboratories, users of laboratories, industry members, regulators etc. Such programs provide the required impetus to the quality movement in the country.

Q Finally, what is the message you wish to share with our readers?

Consumers should demand quality in all products they purchase and in any service they avail. Consumer should use only those laboratories that are accredited by NABL for testing and calibration of their material/equipment. Consumers should verify whether the tests they require are in the accredited scope of the laboratory. Also, vigilant consumers play a major role in the quality campaign. Any misuse of NABL accreditation (example: share with NABL, any test report that is in violation to the NABL requirements, malpractices by laboratories). Each individual contributing to the development of quality consciousness will soon build a robust quality driven economy in the country!

#65YearsOfSuccess

65th Anniversary

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We hope to continue serving you for many more years to come.

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AFTERWORD

Pyush Misra
Trustee,
Consumer Online Foundation

NABL Accreditation *vs* ISO Certification

- The Technical Competence Check Difference

"Are ISO certification and NABL accreditation two sides of the same coin? Can an organisation opt for either one of the two and deem it as a symbol of approval of its quality, capability and performance? Fact is that though both certification and accreditation bodies check for compliance, the difference is much more than mere terminology"

– clarifies Pyush Misra

ISO 9000 Certification and NABL Accreditation – *Difference*

ISO 9000 CERTIFICATION is on Quality System Management wherein which certifies 0rganisation/product meets pre-established standards or regulations, whereas the NABL Accreditation provides formal recognition of technical competence of the CABs, thus providing a ready means for customers to find reliable testing (including Medical), calibration, Proficiency Testing Provider (PTP) and Reference Material Producer (RMP) services in order to meet their demands as well as the Quality system.

Most people are confused between the two terms and consider them interchangeable. So, is a certified organisation accredited as well and vice versa?

Understanding what ISO certification and NABL Accreditation

ISO only provides the standards and does not certify any entity as such. Third-party certification providers conduct the required checks and audits to check the compliance of a product, process or system to determine whether or not it meets the ISO standards. If it does, the certification body will provide a written assurance by issuing a certificate that it is ISO-certified.

ISO 9000 relates to Quality Management System and is the most popular standard. Most companies opt for certification of this standard as proof that they have the right quality system elements in place to maintain an efficient quality system. It symbolises that the organisation can satisfy its customers, meet regulatory requirements and achieve continual improvement.

In contrast, accreditation is a means of evaluating the competence of the conformity assessment bodies (CABs). Every country usually has an accreditation body – in India NABL which is a constituent board of QCI that is confined to provide third-party assessment of the quality and technical competence of testing and calibration laboratories.

Q. How is NABL accreditation different from ISO 9000 certification?

ISO 9000 Certification is on Quality System Management only whereas the NABL Accreditation provides formal recognition of technical competence of the CABs, thus providing a ready means for customers to find reliable testing (including Medical), calibration, PTP and RMP services in order to meet their demands as well as the Quality system.

Accreditation is a higher level activity than system certification. Laboratories can be checked and certified for their compliance to international management system standards such as ISO 9000. This involves the auditing of an organization's quality management system. Although this will give you confidence of the laboratory's quality system, it tells you nothing about its technical competence or its ability to provide reliable and accurate test data that will be accepted by your customers and trading partners. Proper technical evaluation requires the use of technical experts who can assess the CAB against internationally accepted criteria. These criteria are embraced globally in documents like ISO/IEC 17025for Testing & Calibration laboratories, ISO 15189 for Medical laboratories, ISO/ IEC 17043 for PTP & ISO 17034 for RMP. Accreditation bodies may also apply additional technical requirements for evaluating a CAB, as per

A CAB can choose to take help/support from an external advisor or consultant while preparing for the NABL accreditation. However, NABL strongly recommends that CABs should prepare for the accreditation on their own.

If a CAB takes help from an external person/organisation, it has to mandatorily declare the same to NABL. Further, during the accreditation process (either document review or assessment), NABL will not entertain the external entity; the officials and assessment team will interact with the CAB staff only.

requirements of different technical fields. Accreditation against these international standards also covers the quality management system elements of ISO 9000. So NABL accreditation, which is based on these standards is a measure of both technical competence and quality management system and is the most appropriate process rather than ISO 9000 certification.

In fact, there are times when being certified may not suffice and the industry may demand accreditation to demonstrate compliance that it has been verified by a national accreditation board. Here, it is significant that NABL has been formulated as an autonomous body by the Government of India. ISO is an independent international organisation while the associated certification bodies are separate legal entities and usually function as private businesses.

Conclusion

It cannot be denied that certification and accreditation are quite similar in certain contexts. In the same vein, ISO and NABL are different entities. ISO Certification is on Quality System Management whereas the Accreditation provides formal recognition of technical competence of the CABs. Both operate on the overarching aim to promote a more robust and lucrative business that stands out from others. Therefore, both NABL accreditation and ISO certification are part of the quality infrastructure of our country. They will be the harbinger of a comprehensive advantage that delivers a strong assurance of quality and reliability to the table!

Other common benefits include:

- Proof of compliance to clients and interested parties
- Boost assurance for clients
- Guaranteed customer acquisition and retention
- Increased productivity, efficiency and profit
- Independent and global recognition of efforts, products and services.

THE COMPETITIVE EDGE OF ACCREDITATION

Accreditation adds value to businesses, conformity assessment bodies and the regulators as well. It provides the assurance that a product, service, business process or an organisation conforms with specific standards in the quality, safety, health or other domains.

Accreditation is a crucial element of the quality infrastructure of a country

CONSUMERS EVERYWHERE DEMAND and expect quality, reliable and safe products and services. Manufacturers and other businesses that are committed to meeting consumer needs and delivering customer satisfaction opt for testing, inspection, certification and calibration as a mark of their credibility. It demonstrates that they meet and maintain certain government, industry or international standards. This may be voluntary, or in certain cases, mandated by the government or other authorities.

Some organisations have in-house laboratories or conduct self-assessments to declare that their products or services are up to a certain standard. However, it is always better to engage an external assessor to verify conformity with standards as it will increase the reliability quotient. And when the testing, inspection, certification or calibration is done by an accredited conformity assessment body, the benefits multiply manifold.

What's in Store for Organisations?

Let us take a look at how accredited services can help businesses:

- The marketplace is becoming increasingly complex and dynamic. Being checked and approved by an accredited agency gives consumers the confidence to buy and use the said product or service as they meet certain quality and safety standards. It will also make them loyal and satisfied patrons based on the belief that the organisation has their best interests at heart and that they have made the right choice.
- The accredited stamp of approval differentiates the organisation from its competitors in the market and wins new business. The increased trust becomes a magnet that attracts more and more customers.
- It mitigates risks in day-to-day business by ensuring that the activities are organised and there is minimum scope for errors or losses due to defects. Preventive protocols to minimise the advent of adverse contingencies will be in place at all times, thus reducing liability costs.
- It reduces money and time costs and promotes efficiency in the long run. The need for additional testing and other proofs for physical safety or quality is eliminated as it has already passed stringent quality measures and been vetted by others in the field. The results can work as supportive evidence of due diligence in the event of legal cases.
- The accredited results play a crucial role in supply chain management and improve relationships with other intermediaries. They can also form the basis for making efficient and informed choices about domestic suppliers, importers, etc.
- Product testing and certification by an accredited agency will identify the gaps in processes or programs. The business will become aware of what is working well and what needs further improvement. Fixing the gaps can improve performance, thus enhancing their reliability even more.
- Apart from giving a boost to operational efficiency, it also helps with better decision making and risk management.
- The accredited conformity assessment results are credible evidence that can be used as a powerful marketing tool to drive increased sales and profits.

- The business gains international recognition and can access international markets too.
- It supports innovation by providing a framework for developing and implementing new processes and technologies. The business can stay ahead of the curve by driving constant improvements on the internal front.
- It also promotes trust and dedication in the staff as they realise that they are working for an organisation that is honest, committed and reliable. Each person becomes aware of their role in the company, the best practices he/she needs to adopt and the importance of teamwork. It supports communication and empowers the employees, thus paving the way for improved motivation and productivity.
- Ultimately, it fosters a culture of safety and quality across the organisation and the benefits will be supreme. The organisation will build a strong reputation for itself in the marketplace.

In sum, this becomes a badge that inspires instant trust, confidence and quality assurance that the business has the systems in place to continually provide reliable and quality products or services. Moreover, the organisation will continue to strive to maintain the high standards, thus augmenting its accountability in the market.

What's in Store for Conformity Assessment Bodies?

Accredited conformity assessment bodies have proved that they meet all required standards and regulatory requirements. The formal recognition of competence in accordance with international criteria translates into varied advantages for testing laboratories like:

- A ready means for customers to identify and select reliable testing, measurement and calibration services that are able to meet their needs.
- Increased confidence in testing/calibration reports issued by the laboratories as they are marked by accuracy and reliable results.
- Enables the laboratories to comply with domestic regulatory requirements as well as international laws, thus avoiding costly penalties.
- Laboratories gain better control of their operations along with feedback on various parameters like technical competency, robustness of the quality management system and whether they are performing in accordance with international criteria. They will undergo continual improvements and supervision, thus fostering a more secure atmosphere.
- Helps them to participate in tenders that require independently verified laboratories.

NABL accreditation process is structured and time bound; each activity/process involved in accreditation starting from receipt of application to final decision/issue of accreditation certificate is a time bound activity. The laboratories are required to comply with the prerequisite requirements of application in a predefined time format. The staff members have to be educated about the need and process of accreditation while reassuring them that it will be beneficial for them as well.

There will be issues in complying with the pre-requisites of application for accreditation such as management system document/quality manual, mandatory procedures, participation in PT, conducting internal audit and management review etc.

Bear in mind that an increasing number of public and private organisations are specifying accredited testing, inspection or certification as a precondition to tendering for contracts.

- Regulators always prefer to use results from accredited laboratories when providing services that promote an unpolluted environment, safe food, clean water, energy, health and social care services for the public benefit.
- Accredited laboratories also gain international recognition and equivalence.

In sum, there will be a rapid rise in business for accredited laboratories.

Benefits of Accreditation for Proficiency Testing Providers

The benefits of proficiency testing are widely recognized. These include:

- Many laboratories operate in isolation from other laboratories and do not have ongoing opportunities to compare their data with others. Without such opportunities there are risks that the data of a laboratory may have errors, biases or significant differences when compared to data from other similar laboratories. Proficiency testing provides an opportunity to undertake such comparisons and to have an independent appraisal of the laboratory's data compared to reference values (or other performance criteria) or to the performance of similar laboratories. The results from such participation provide laboratory managers with either a confirmation that the laboratory's performance is satisfactory or an alert that an investigation of potential problems within the laboratory is required.
- Comparison of the performance of a facility's performance with that of other participating (peer) facilities
- Monitoring of the long-term performance of a facility.
- Improvement in the performance of tests/calibrations following investigation and identification of the cause(s) of unsatisfactory PT performance, and the introduction of corrective action to prevent re-occurrence.
- Staff education, training and competence monitoring.

Enabling trust in innovation and new technologies

The adoption of new technologies is increasing. While much of international trade operations is still paper-based, McKinsey estimates digitisation has raised global GDP by 10.1% in the past decade. According to the WTO, international trade costs declined by 15 percent between 1996 and 2014 and new technologies will play a key role in further reductions. However, new technologies bring new threats and governance challenges. Cybercrime has increased exponentially, costing the global economy more than USD 1 trillion in 2021. Global cases of fraud are estimated to cost USD 3.6 billion across 133 economies.

The emergence of artificial intelligence (AI) and blockchain has seen the development of multiple standards and protocols. A global survey by PricewaterhouseCoopers (PwC) reported that whilst over 80% of respondents already had some involvement in blockchain technology, nearly half believed that regulatory uncertainty and a lack of trust amongst users were the biggest barriers to adoption. The survey also revealed concerns about a potential lack of standardisation and interoperability between blockchains. Governments and organisations are starting to explore these technologies. For example, the European Union's AI Act aims to establish the first comprehensive regulatory scheme for AI.

- Evaluation of methods, including the establishment of method precision and accuracy.
- Contribution to the facility's overall risk management system.
- Confidence building with interested parties like customers, accreditation bodies, regulators, specifiers.

Formal recognition of competence of reference materials producers (RMPs) has many advantages like:

- Confidence in measurements by establishing traceability to appropriate measurement standards such as the use of certified reference materials (CRMs) produced by a competent producer to give a reliable physical or chemical characterisation of a material.
- It provides assurance that the accredited RMPs are competent to produce the reference materials (RMs) as listed in the scope of accreditation. It provides confidence to RM users that the RMs, and CRMs in particular, are produced according to technically valid and internationally recognised principles, and fit for the intended uses.
- RMs provide one of the most effective ways of assessing and demonstrating that the measurement process is in statistical control because the homogeneity and stability of RMs have been confirmed to be suitable for use as quality control materials.
- It eliminates the need for the users to evaluate the quality of the RMs themselves.

What's in Store for Regulators?

The government and regulators set policy requirements and detailed technical conditions; they rely on the accredited conformity assessment bodies to evaluate and monitor compliance with the same. Tests by accredited bodies will show that the business is following the set standards and requirements, thus eliminating the need for checks by the regulators. This makes it easier for the regulators to protect human health and the environment by ensuring that safe goods and services are available on the market.

Conclusion

The purpose of accreditation is to assess an organisation's competence and ensure that recognised industry standards are being met. This works as a valuable tool for ensuring quality and safety in manufacturing processes. It also ensures the reliability of data for research and development. In fact, ILAC and IAF have together stated that, "Accreditation supports regulators, business and consumers in meeting their diverse needs, whether they be technical product safety, good governance, climate change, energy, fair markets or public confidence."

Accreditation: Facilitating Global Trade

It is accreditation that imperceptibly supports the constant movement of capital, goods and services between countries to meet global demand while eliminating undue risks to the health and security of consumers and the environment.

TODAY, WE TAKE the vast variety of products and services available in the market for granted. We expect to have a range of options in everything from the food we eat and clothes we wear to the books, mobile phones and other items we buy in our daily life.

While we are used to the wide choice, do we ever pause to think where the products actually come from?

Globalisation has expanded trade to the extent that we can enjoy goods and services from all parts of the world while sitting in our country itself. It is now impossible to even imagine living in a world where our purchasing options are exclusively limited to those originating in the country we live in!

Global trade is growing every year and runs into trillions of dollars. In fact, international trade makes up a large share of the Gross Domestic Product of most countries.

The global supply chain has evolved to the extent that a single product, say a television, will incorporate intermediate parts from a range of suppliers from diverse countries. This obviously involves shipping diffusion from one coast to another all around the globe for the television to be assembled completely and ready for use!

This brings the question of quality and competence into the picture. Indeed, how can buyers be sure of the reliability of the sellers from other countries and the information they provide about the properties of their goods or services? What if these goods or services of global trade end up posing a threat to human health and safety or the environment?

It is for this purpose that the globe has witnessed the evolution of a large number of national and international voluntary and mandatory technical regulations, standards, testing, inspection and certification procedures across all market sectors. These apply to all aspects – be it samples, products, services, management systems, processes, personnel or bodies within the global trade market.

The Role of Standards

Standards and other regulations – along with testing, calibration, inspection and certification - are designed to meet the legitimate requirements of quality and safety that consumers, businesses, regulators and other organisations demand of goods and services, irrespective of their country of origin. Such conformity assessment – in the form of product testing or medical testing - has become an easy and accepted method of ensuring that the suppliers maintain the standards in a consistent manner and can be relied on to deliver as expected.

Companies and other providers, on their part, use standards to demonstrate their commitment to upholding quality, safety and other parameters. They showcase their certifications by third-party services as a symbol of their technical competence, reliability, quality management and so on, as proved by their conformity and compliance with the standards.

However, what if the competence of the certification body itself is considered questionable? This is normally the case for suppliers originating from underdeveloped or developing economies. It is often seen that while the international buying community exercises due diligence in ensuring the claims made by their suppliers are current and valid, the reliability of the conformity assessment bodies comes under the scanner….

ISO certification's ability to signal quality characteristics depends on the credibility of the organisation providing the certification in the first place!

To add to this, trade regulations and product/service standards can vary from country to country. The ensuing costs and burden of re-testing in every country become prohibitive to the businesses, making them a technical barrier to both export and import opportunities.

The WTO's Agreement on Technical Barriers to Trade (TBT) clearly states that “Members shall ensure that technical regulations are not prepared, adopted or applied with a view to or with the effect of creating unnecessary obstacles to international trade.”

However, it also adds a precautionary note with, “For this purpose, technical regulations shall not be more trade-restrictive than necessary to fulfil a legitimate objective, taking account of the risks non-fulfilment would create. Such legitimate objectives are, inter alia: national security requirements; the prevention of deceptive practices; protection of human health or safety, animal or plant life or health, or the environment.”

The Role of Accreditation

It is accreditation that reinforces conformity assessment – like calibration, testing, inspection and certification - by providing an external badge of competence for the assessment bodies. It ensures that the auditors of such certification bodies are qualified to conduct conformity assessment tasks in specific business sectors. Therefore, the impartial validation serves as an additional, top-layer of assurance for the competence, reliability and integrity of the conformity assessment bodies (CABs).

Most countries have a sole national accreditation body which ensures that the activity is carried out uniformly across the country. This body will usually accredit the conformity assessment bodies to a recognised international standard, for example ISO 17025 in the case of testing laboratories, thus increasing the credibility of their test results and certificates. Therefore, accreditation plays a key role in removing the technical barriers to trade and promoting confidence among the trading partners.

The global accreditation bodies, ILAC and IAF uphold that many of the key factors affecting global trade are exactly the issues to which accreditation has solutions:

- **Supply chains are becoming more complex, and there is evidence of growing regulatory divergence**
- **Geopolitical factors such as armed conflicts and the global pandemic have impacted the sourcing of raw materials and disrupted established methods of quality assurance**
- **Growing concerns related to cybersecurity, artificial intelligence, data protection, fraud and product authenticity**
- **Consumer consciousness about sustainability, provenance, health and ethics is on the rise, forcing brands to improve their understanding and oversight of their supply network.**

Accreditation works through a process of transparent and impartial evaluation of these organisations against internationally recognised standards and other requirements

And what about the accountability of domestic accreditation bodies? This is, in turn, ensured through international accreditation organisations!

The Role of International Accreditation Cooperations

The International Laboratory Accreditation Cooperation (ILAC) and the International Accreditation Forum (IAF) are the primary international organisations for accreditation bodies. Accreditation bodies around the world are members of ILAC and/or IAF.

In addition to this, there are regional bodies like Asia Pacific Accreditation Cooperation (APAC), European Co-operation for Accreditation (EA), Inter-American Accreditation Cooperation (IAAC), African Accreditation Cooperation (AFRAC) and more.

ILAC and IAF issued a joint statement in 2013, “The primary purpose of both IAF and ILAC is to establish multilateral arrangements between their member accreditation bodies based on mutual evaluation and acceptance of each other's accreditation systems. These arrangements enhance the acceptance of products and services across national borders by removing the need for them to undergo additional tests, inspections or certification at each country of entry. This helps to reduce bureaucracy and the costs to businesses and contributes to operational efficiency.”

Indeed, it is these Mutual Recognition Arrangements (MRAs) that harmonise the application of standards and pave the way for certifications to be mutually recognised by all signatories. In fact, the confidence in products and services, irrespective of where they come from, is based on the existing MRAs signed by accreditation bodies of different countries.

It works like this: When signatories recognise that the accreditation they deliver can be trusted equally, it means that products do not need to be re-tested or re-certified in every new market. For instance, NABL is a signatory to ILAC and APAC MRAs which promotes acceptance by other MRA partner laboratory accreditation systems. This facilitates credence for test/calibration results originating in India in the other countries to which MRA partners represent and vice versa.

This has enabled accredited laboratories in India to achieve a form of international recognition. Test data from such labs that accompany our exported goods are readily accepted in overseas markets by the other MRA countries. This effectively reduces costs for both the exporters and the importers, as it reduces or eliminates the need for products to undergo additional tests, inspections or certifications in another country, thus promoting greater supply chain efficiency and resilience.

Therefore, it is clear that it is multilateral arrangements in the field of accreditation that enhance the acceptance of products and services across national borders, thereby creating a framework to support international trade through the removal of potential barriers.

MRAs uphold that - Tested once by an accredited laboratory or certifier means acceptable everywhere!

Additional Benefits

Being tested by an accredited CAB not only eliminates the need for costly additional testing, inspection or certification by demonstrating that they are operating at an internationally acceptable level of competence. It also goes a step ahead and amplifies the scope of the business to reach out to global customers and expand into new markets overseas. The global acceptance of reports along with the accompanying international recognition and equivalence translates into an opportunity to compete with large players on a level playing field.

It also brings an element of trust between trading partners and supports fair trade practices. In the long run, it will prevent fraud and protect the consumers too. Above all, the business is able to prove that it is committed to delivering the best customer experience!

Conclusion

With the rise of global trade and the complexity of supply chains, accreditation has become increasingly important in ensuring that products are safe and meet quality standards. NABL accreditation works as a passport of trust that enables Indian goods and services to freely circulate on the global market without needing re-testing in each country to which they are exported and sold. Therefore, accreditation supports both the health and well-being of individuals as well as the economic health of countries around the globe!

"Accreditation and trade are bound together by trust – trust is the essential component of trading relationships, whether they are conducted within national borders or with other economies. Economies around the world have long relied on an integrated system of standards, regulations, metrology and accredited conformity assessment to create a quality infrastructure. This integrated system has generated the necessary trust to support trade by ensuring that consumers, businesses and regulators procuring goods and services get what they expect."

– Joint statement by ILAC and IAF

Estimates by the Organisation for Economic Co-operation and Development (OECD) and the United States Department of Commerce state that standards and related conformity assessment have an impact on 80% of the world's trade!

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Payal Agarwal
Editorial Consultant

Accreditation Contributes to the UN's Sustainable Development Goals

"The UN Sustainable Development Goals are designed to transform our world. And accredited conformity assessment can assist in the monitoring and measurement of progress towards the achievement of these SDGs and their associated targets. Not to mention assist in achieving the same…"

– affirms Payal Agarwal

Accreditation is a critical cornerstone in the broad and ambitious plan of action laid out by the SDGs!

THE UNITED NATIONS 2030 Agenda for Sustainable Development sets out 17 Sustainable Development Goals (SDGs) to be a 'blueprint to achieve a better and more sustainable future for all' with the overarching objective of leaving no one behind! Agreed by 193 countries in September 2015, these interlinked global goals are the world's call to action on the most pressing challenges and opportunities facing humanity and the natural world.

The SDGs (with their 169 associated targets) aim to address social imbalances, develop sustainable economies and slow the rate of climate change. They relate to individual problems like poverty, inequality, education, health and economic growth. The United Nations describes the SDGs as seeking to 'protect the planet, and improve the lives and prospects of everyone, everywhere'.

The role of the SDGs is to encourage governments around the world to deliver on their national and international commitments. They implore the authorities to address water and energy efficiency, human rights, public health and other policy areas.

Where Does Accreditation Come In?

Accreditation serves as a trusted platform that ensures and demonstrates that products and services meet specified requirements. The benefits of accreditation are not limited to having a positive impact on trade both within and across borders. It contributes in other non-trade arenas too, such as providing the technical knowledge and capacity to tackle the varied issues addressed by the SDGs.

ILAC underscores the positive impact of accreditation which is clearly aligned with the pillars of 'People, Prosperity, and Planet', and provides policymakers, businesses and other stakeholders with the solutions to implement, measure and monitor many of the objectives and targets contained in the SDGs, and the support to achieve them.

In fact, the theme of World Accreditation Day 2021 itself was *'Accreditation: Supporting The Implementation Of The Sustainable Development Goals'* so as to encourage policymakers to continue to use accreditation to support their SDG Agenda. This brought to the fore the important role that accreditation plays in the achievement of the sustainable development goals like addressing health and safety concerns, and improving the general overall quality of output in an economy.

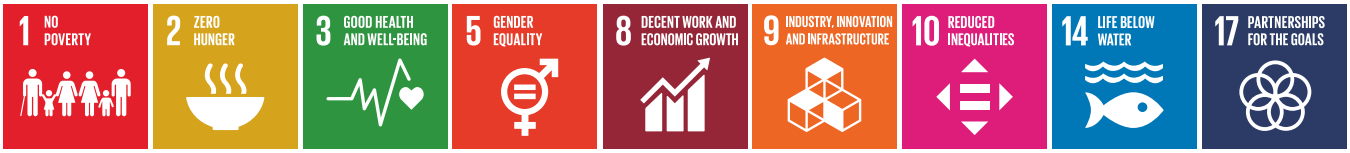
Indeed, it has become clear that accredited conformity assessment provides the technical foundation that is critical to the functioning of developed and developing societies. It enables industrial development, trade competitiveness in global markets, efficient use of natural and human resources, food safety and health and environmental protection. Sound economic growth is bound to follow.

For instance, SDG 5 relates to gender equality. By using gender-sensitive standards and favouring technical competence, conformity assessment has a positive impact on gender equality and on the economic empowerment of women!

The following year, the theme of WAD 2022 was 'Accreditation: Sustainability in Economic Growth and the Environment' with a focus on how accreditation supports the SDGs 6, 7, 8, 9, 11, 12, 13, 14 and 15. Again in 2023, the theme of 'Accreditation: Supporting the Future of Global Trade' focuses on how accreditation supports the United Nations Sustainable Development Goals (SDGs) 1, 2, 3, 5, 8, 9, 10, 14 and 17.

This acquires more relevant connotations as the 2023 SDG Summit – to be convened on 18-19 September this year during the United Nations General Assembly high-level week - marks the mid-point of the implementation of the 2030 Agenda.

The IAF has also stated that, "The world economy relies heavily on natural resources provided by healthy ecosystems, and yet we continue to put these ecosystems through enormous stress and to consume resources at an alarming rate. Accreditation, alongside other quality infrastructure tools including metrology, standardization, conformity assessment and market surveillance, can support the shift to a circular economy and more sustainable forms of production."



Accreditation acts as a catalyst for sustainable development by ensuring that organisations and systems meet internationally recognised standards and best practices. International organisations such as the World Trade Organisation (WTO), the Organisation for Economic Cooperation and Development (OECD) and the United Nations Industrial Development Organisation (UNIDO) have suggested that greater adoption of (and compliance with) international standards and accreditation in national frameworks can promote regulatory convergence globally.

ILAC and IAF in association with UNIDO released a brochure in 2021 to highlight the contribution of accredited conformity assessment services to the implementation of the 2030 Agenda for Sustainable Development. We present a synopsis of how accreditation is a force to reckon with in relation to some of the SDGs that relate to global trade:

SDG 3: Good Health and Well Being

Health is a crucially important social and economic asset and a cornerstone for human development. Whilst the provision of universal health coverage remains a major global challenge, the use of accreditation within the health and social care sector can help drive up the quality and consistency of services provided.

Medical laboratory services are essential in the diagnosis and assessment of the health of patients, and encompass arrangements for requisition, patient preparation, patient identification, collection of samples, transportation, storage, processing and examination of clinical samples, together with subsequent result validation, interpretation, reporting and advice. Results need to be accurate, timely, linked to the correct patient and processed with respect for ethics, confidentiality and the safety of the patient. Accreditation to the internationally recognised standard ISO 15189 enables laboratories to demonstrate their competence to deliver these services reliably. Also:

- Point of Care Testing - where testing is carried out outside the controlled and regulated environment of a medical laboratory, to enable patients to still be able to trust the results
- Reference Material Producers - to demonstrate that they are competent to produce necessary reference materials (such as blood, urine or serum), allowing laboratories to verify their ability to measure accurately
- Medical Reference Measurement Laboratories - to enable the accuracy and traceability of some measurements in medical laboratories to be demonstrated
- Accredited certification to ISO 9001 for organisations that provide health and social care services to demonstrate continuous support to quality
- Accreditation of inspection bodies inspecting health-related services
- Medical devices under accredited certification to the international standard ISO 13485 demonstrating manufacturers address regulations and have commitment to safety and quality

SDG 8: Decent Work and Economic Growth

Health and safety are well recognised as having an impact on sustainable development - from eradicating poverty through job creation, sustainable livelihoods, technology and skills development, food security and equitable growth; to ensuring sustainable consumption and production through dealing with environmental concerns related to health and safety in the workplace.

Businesses face increasing social, commercial and regulatory pressures to assess and control hazards and risks from their operations. Accreditation ensures that employees, purchasers and regulators can have confidence in the provision of services that have an impact on health and safety.

- Testing including occupational hygiene, asbestos fibres and air monitoring, identification of legionella bacteria, land and air pollutants, and electrical safety
- Certification of occupational health and safety management systems or other management systems
- Inspection to support the management of effective health and safety

SDG 9: Industry, Innovation and Infrastructure

Industrialisation is one of the main drivers of sustained economic growth and sustainable development. Industry is also the most dynamic driver of prosperity and collective wellbeing.

Industrial development is therefore a key objective intrinsically woven into the architecture of the 2030 Agenda. Manufacturers need to ensure products are of consistent high quality, comply with regulations and standards, and meet specifications. Accreditation enables consumers, suppliers, purchasers and regulators to have confidence that products placed on the market are safe and meet the manufacturers claims made about them.

- Testing of food products, plastics, fuels and oils, detergents, paints and coatings, toys and consumer goods, textiles, glass, cosmetics, construction products and electronic goods.
- Calibration and dimensional testing to ensure accurate measurement
- Safety testing of products including children's cots and components, toys and their packaging, prams, bicycles, sports equipment, textiles, leather goods, ceramic and glass wear, and articles intended for use with food
- Chemical analysis and determination of physical parameters to ensure safe use of chemicals
- Inspection throughout the manufacturing supply chain including design and manufacturing inspection of items of equipment, production capability assessment, the construction of pressure systems, storage vessels and tanks, process plant and systems, and the carriage of dangerous goods by rail or road
- Certification in a range of areas that provide supply-chain confidence for those operating in the manufacturing sector.

"One of the key strengths of accredited conformity assessment is that it can be applied to almost any industry sector and situation. This has enabled it to establish a strong track record of making a significant contribution towards reaching many of the 17 SDGs outlined in the UN agenda." – UKAS, the national accreditation body in the United Kingdom

Conclusion

Accreditation serves as a critical enabler of sustainable development by supporting the SDGs in promoting responsible practices, enhancing trust and enabling progress in various sectors. However, this ambitious plan requires the collaboration of all stakeholders in the society, from local and national governments to individuals to advance the global agenda for a more sustainable and inclusive future!

NABL Initiatives that Contribute to Public Health

Public health and quality of life depend on certain specific sectors of the economy – like health care, food, drinking water, pharmaceuticals and environment. The health and safety of consumers is considered a critical dimension of universal health coverage. NABL is actively working and making great contributions to such crucial sectors.

Ensuring Access to Clean Drinking Water: NABL's Scheme to Improve Water Quality Testing in India

The need for access to clean drinking water cannot be overstated. It is essential for human survival, and the lack of access to it can lead to several health problems. Waterborne diseases like cholera, typhoid fever and dysentery can lead to severe health complications and, in some cases, even death. This is why it is crucial to have standard water quality testing laboratories that can accurately test the quality of drinking water and ensure that it is free from harmful contaminants.

Access to clean drinking water is a fundamental right of every human being, yet a significant portion of the world's population does not have access to it. In India, the situation is not any different, as many people living in rural, urban and peri-urban areas struggle to get access to clean drinking water.

To address this problem, NABL has launched a scheme to sensitise the government drinking water testing laboratories at the block/sub-divisional level performing basic water quality testing to ensure the availability of standard water quality testing laboratories to the people who need them the most.

The scheme is an independent quality assurance scheme that is not covered under APAC and ILAC MRA. The scheme is based on satisfactory proficiency testing (PT) performance and is valid for a cycle of three years, which will be renewed after every three years based on the laboratory's performance in PT. During the recognition period (within three years), on-site assessment (surveillance) may be conducted to ensure that the laboratory continues to meet the set standards.

The scheme launched by NABL is a significant step towards ensuring that people living in rural, urban, and peri-urban areas have access to clean drinking water. Its success is dependent on the laboratories' performance in proficiency testing (PT), which is a measure of the laboratory's accuracy and reliability in testing water quality. If a laboratory fails to meet the set standards, it may not be recognised under the scheme.

NABL has granted accreditation to approximately 529 laboratories for water testing as per 'ISO/IEC 17025:2017 General Requirements for the Competence of Testing and Calibration Laboratories'. Additionally, NABL has also recognised approximately 648 laboratories based on their compliance with the 'NABL 139 Criteria for the Recognition of Government Drinking Water Testing Laboratories at the Block Level or Sub-Divisional Level'.

To ensure safe drinking water for all citizens, the Ministry of Jal Shakti has notified all its testing laboratories at the district level to obtain accreditation from NABL to ensure technical competence and compliance to the international standard ISO/IEC 17025:2017

It is hoped that this scheme will help reduce the number of waterborne diseases caused by contaminated drinking water!

Preserving Soil Health in India: NABL's Efforts to Enhance Soil Testing Laboratories

Soil is the most vital component for food and fibre production; preserving this critical natural resource is

paramount for protecting the environment and ensuring that current and future populations are healthy and well-fed. For many decades, research has consistently shown that the best means of improving and restoring soil quality and productivity is by proper and regular additions of organic materials, mainly through the use of crop rotations, cover crops, crop residues, animal manures, composts and reduced tillage. Regular monitoring/testing of soil health can achieve this.

The Department of Agriculture and Co-operation under the Ministry of Agriculture and Farmers' Welfare, Government of India, has initiated the Soil Health Card (SHC) program to assess the current status of soil health and determine changes in soil health affected by land management over time. It also improves the nutrient status of the farm soil and helps in further advice on the dosage of fertilisers and soil amendments to maintain soil health.

Laboratories involved in testing soil need to be monitored regularly to ensure that the tests performed are correct the first time and every time. NABL has recently launched a scheme to sensitise the government soil testing laboratories at the block/sub-divisional level to ensure the availability of standard soil quality testing laboratories.

The scheme is an independent quality assurance scheme and is not covered under the APAC and ILAC MRA. It is based on satisfactory proficiency testing (PT) performance and is valid for a cycle of three years, which will be continued on a renewal basis after every three years. The laboratory application will be reviewed by NABL and the decision on recognition will be taken based on performance in proficiency testing. During the recognition period, on-site assessment (surveillance) may be conducted.

NABL has taken the initiative to ensure and monitor the quality of results produced by the laboratories involved in issuing Soil Health Cards. This further supports the slogan given by our Honourable Prime Minister while launching the soil health card scheme, 'Swasth Dharaa, Khet Haraa' - Healthy Earth, Green Farm'.

This will go a long way in ensuring the availability of standard soil quality testing laboratories and the improvement of soil health.

NABL's Program to Improve the Quality of Medical Testing in India

NABL has recently launched a program called NABL Medical (Entry Level) Testing Laboratories (NABL M(EL)T Lab) Program. This program is aimed at medical laboratories that perform basic routine tests and provides them with an opportunity to be recognised for their satisfactory proficiency testing (PT) performance.

Under this program, medical laboratories that meet the requirements set forth by NABL will be recognised for their ability to perform basic routine tests. This program is not covered under the APAC and ILAC MRA, which means that laboratories recognised under this program will not be internationally recognised.

The accreditation is valid for one cycle of three years, and laboratories that wish to maintain their recognition will need to renew their certification after this period. The program is only applicable to basic routine tests, and laboratories will need to demonstrate satisfactory performance in PT programs to be eligible for recognition under this scheme.

This program is particularly important for medical laboratories that are just starting out or do not have the resources to obtain full accreditation. By participating in the NABL M(EL)T Lab Program, these laboratories will have the opportunity to demonstrate their proficiency in basic routine tests and gain recognition for their abilities.

Overall, this program is a valuable initiative that provides medical laboratories with an entry point to the world of accreditation. While laboratories recognised under this program may not be internationally recognised, they will still be recognised by NABL and will have the opportunity to build their

reputation and credibility within their local community.

NABL has recognised approximately 546 medical laboratories based on their compliance with the 'NABL 128 Criteria and Procedure for NABL Medical (Entry Level) Testing Labs {NABL M(EL)T Labs} Program' in which 176 medical laboratories are from NACO (National Aids Control Organization).

In addition to the above, NABL is contributing towards government schemes related to food, environment, drugs and pharmaceuticals, etc. It is also striving to make accreditation a 'thumb rule' for all conformity assessment bodies!

Real Life Experience With NABL Accreditation

ALCALAB PVT. LTD, a calibration laboratory in Jamshedpur, won NABL accreditation way back in 1998 and became the first NABL accredited laboratory in Eastern India in the private sector. At that time, it was an extremely complex task to address all the NABL requirements in respect to system and technical requirements.

During the initial period of establishment, NABL itself was in the process of developing their rules, regulations and requirements. Though the accreditation cost was not as prohibitive as it is today, the NABL accreditation process itself was in the early stage of development and lacked clarity; and there was none to clarify the same.

Today, NABL accreditation is virtually a mandatory requirement for all industries and organisations supplying their products and services to the government, PSUs, OEMs and corporate organisations. This requirement is included in their order itself and has to be met compulsorily by the suppliers. Obviously, customer orders will go only to NABL accredited suppliers.

We perceive varied benefits of being a NABL accredited lab. It ensures that we maintain high quality of measuring instruments and equipment consistently through their yearly audit. This helps to produce and supply better product quality. Since, NABL accreditation is now applicable for product/material testing as well as hospitals and pathological laboratory, better quality of services is expected from such service providers too.

Industries too stand to gain considerable value addition by seeking reports from NABL accredited labs. The (customers i.e., users of various types of products and services) can also expect more reliable, accurate and

consistent quality of product and services. For example, patients can expect more accurate and consistent pathological reports. Aviation industries can expect more reliable functioning of their various instruments in the control panels. Automotive industries can expect lower component failure rate because of accurate measurement of assembly components.

We feel the Consumer Guidance Society of Jamshedpur can play a guiding role in building consumer awareness by publishing journals, holding discussion sessions with the consumers, organising seminars, conveying importance of accurate and consistent measurement in day to day life through slogans, posters, banners, displays, etc. Typical examples of all these in our everyday life could be raising questions like:

- How can consumers be assured that the jewellery they are purchasing is of accurate weight, in absence of valid calibration evidence?
- How can they be assured that the weight of grocery provisions the seller is supplying to them using uncalibrated balance/weightsis reliable and correct?
- How accurate is their blood pressure or sugar level or X-ray report provided by an uncalibrated/ invalidly calibrated pathological laboratory?
- How can acar driver be confident that the pressure in the tyres is actually not more or less than what is being displayed on the uncalibrated pressure gauge indicator which may adversely affect his car mileage or tyre life?

Yet, being NBL accredited brings a few key challenges in our day-to-day functioning:

- **Calibration charging rate:** The calibration cost is increasing exponentially on the one hand and customers are not willing to pay accordingly on the other
- **Unscrupulous labs:** These issue invalid calibration certificates at cheaper rate by taking advantage of customers ignorance to detect the same
- **Locational disadvantages:** Limited bigger customers, no calibration training facilities, NABL auditorsand experts unwilling to travel to Jamshedpur to avoid unnecessary waste of man-days.

Following are a few pointers from our experience with NABL accreditation for creating more understanding of the calibration process for the consumers:

- **How can customers select a technically competent calibration lab to add real value to their measurement performance:** Most customers have a common mistaken beliefthat all calibration labsare equally competent to calibrate their instruments, if they are NABL accredited. This is totally wrong. The lab chosen must have NABL accreditation for the required scope which is suitable for the instrument to be calibrated like Range, Accuracy, Measurement Uncertainty and so on. For example, for calibration of a Micrometer having measuring range of 500 mm, NABL Accreditation Scope for Range parameter must be at least 500 mm. If the accredited range is less, then the said lab is not competent to calibrate the Micrometer.
- **How should customers study a calibration report properly before using it for checking/inspection purpose for meaningful use:** Customers must know how to study a calibration report issued by a calibration lab before using it for measurement purpose. For this, the customer has to determine the Acceptance Criteria(Permissible Error) of each of their measuring instrument. This is to be compared with the maximum error reported in the calibration report issued by the calibration lab. This calibrated instrument can be used for measurement purpose only if reported maximum error is less than the Permissible Error determined for the instrument. Instrument calibration becomes meaningless unless this exercise is carried out and followed in practice diligently.

With rapid improvement in technology in all spheres through application of software and recently AI, calibration techniques have also progressed significantly. High end software, sophisticated CMM, AI based measuring instruments arenow being used extensively. But, along with advancement of technology, high accuracy calibration cost with minimum Measurement Uncertainty has also increased significantly. Moreover, with continuous upgradation of measurement technology using high-end software happening today, the calibration process also needs regular upgradation of knowledge, expertise and calibration facilities which is costly.

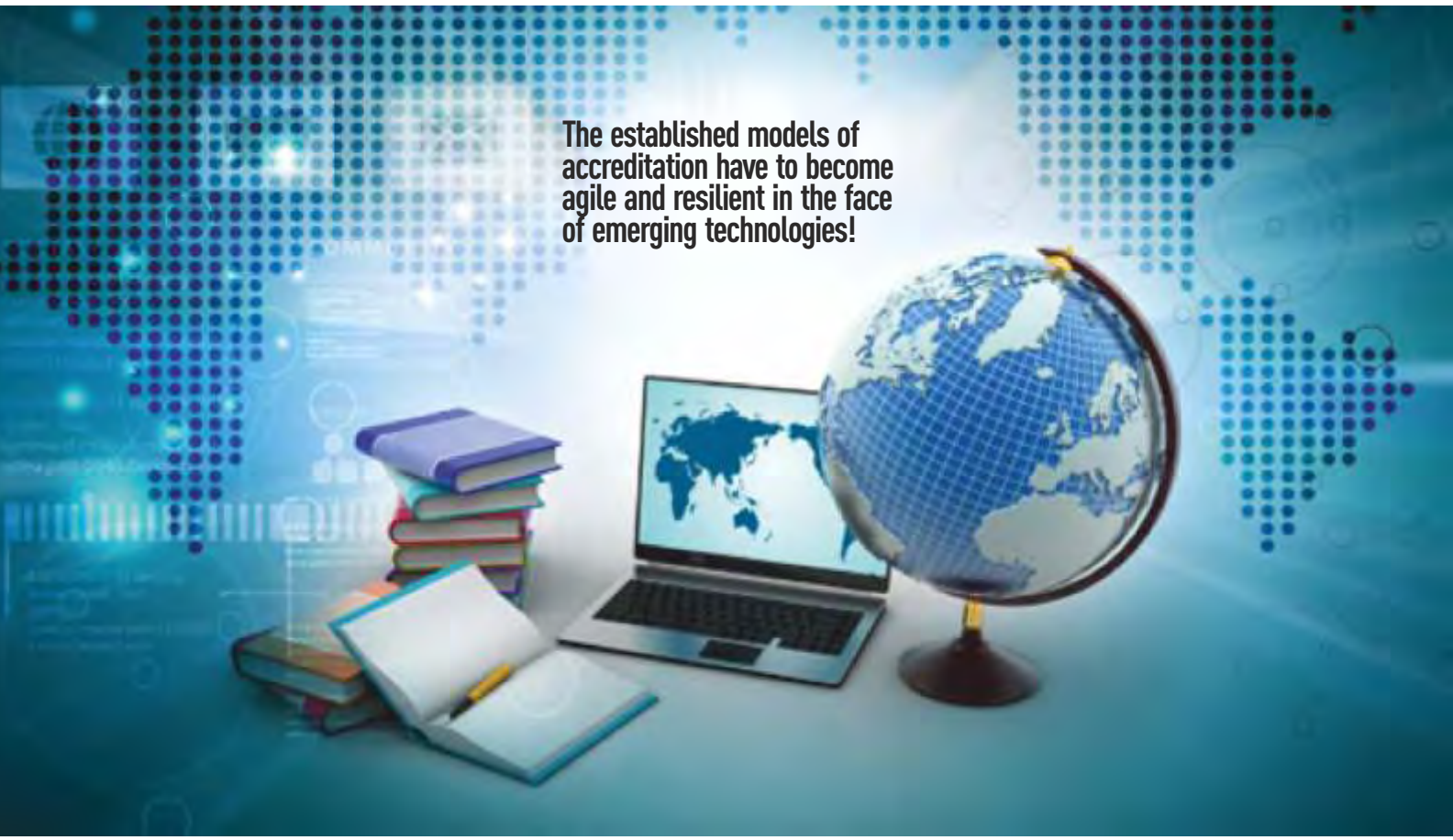
About Alcalab:

Alcalab calibration laboratory was established in 1994 as a small facility at Adityapur. Industrial Area, Jamshedpur. Initially, the calibration services were limited mostly to the dimensional equipment of local industries supplying products to nearby OEMs and larger industries. Subsequently, with increasing demand by the industries for high quality calibration in different fields, the laboratory facilities were upgraded significantly: high accuracy master equipment and reference standards added, trained and skilled manpower employed and rigidly controlled calibration environment provided. This helped it to achieve higher level of accuracy, consistency and reliability in calibration work with reduced uncertainty in measurement. To sustain and continually improve superior standard of calibration, the laboratory went for NABL accreditation way back in 1998, ahead of most of others present in the field. With an impressive client base of more than 2000 odd large, medium and small organisations in diverse manufacturing and service segments located at different locations, Alcalab today stands as a premier calibration laboratory in the country.

Bina Jain
• Former President, All India Women's Conference (AIWC)
• Chairman, Healthy You Foundation, New Delhi

How Technology will Shape the Future of Accreditation

Accreditation has to constantly evolve to keep up with both the changing needs and new technologies. The emerging trends signal scores of potential benefits; however, some challenges lie in store as well!



ACCREDITATION IS CONSIDERED the most pervasive form of quality review for an organisation. The businesses have to go through a rigorous process which validates that they meet stringent standards. Therefore, the accredited CABs can objectively state conformance of the tested products or services to specified requirements.

This brings unique strengths to the table - it contributes to both improving trade flows and delivering internal benefits to the economy on an ongoing basis. NABL accreditation is increasingly being used by regulators and the government to ascertain the quality of products and services.

Despite the apparent positive impact of accreditation, there is a need for continued evolution to meet changing industry requirements and to support our future trading systems. In fact, while most industries and sectors are being rapidly transformed by digital technologies in the ongoing fourth industrial revolution, alas, the conformity assessment sector seems to be lagging behind on the digital adoption curve.

Looking Back

Accreditation has customarily involved documenting and reporting by expert evaluators during on-site surveys before they are compared to the applicable standards. It has been slow to change as it is plagued by paper-intensive processes and fluctuations in manual experimental conditions. This brings both irregularities like variations in human workflows and differences in quality control.

But can we accept, say, inconsistent equipment calibration in this day and age of exceptional technological advancements? What about the brewing sense of dissatisfaction with the current accreditation systems in terms of speed and quality?

Accreditation bodies have to develop their organisational capacity to ensure that they are responsive to changing industry needs. Moreover, they must make the necessary investments to make the data accessible and usable. This will bring in efficiency in the processes as well as lead to improved effectiveness.

Looking Ahead

Over the last couple of years, accreditation has been witnessing a trend towards new approaches that draw on the latest information technologies. The COVID-19 epidemic forced the entire world to work remotely and adopt digital options. The fields of accreditation and conformity assessment have been no exception, with remote surveys taking the place of on-site ones so as to maintain confidence and supply chain fluidity. Even as we speak, there is an increased use of remote techniques - like video conferencing - for audit, assessment and evaluation. This brings flexibility and efficiency even as it reduces costs and minimises logistical challenges.

Beyond virtual assessments, the vision of emerging trends and technologies in accreditation encompasses the use of new techniques like sensors and data feeds apart from blockchain and artificial intelligence. Let us take a look at the possibilities that can revolutionise the way accreditation is conducted in the future:

- **Mobile Apps:** An app can provide easy access for stakeholders to accreditation information, updates and resources. It can provide a personalised dashboard, regular notifications, and collaboration tools to enable seamless communication and engagement throughout the accreditation journey.
- **Blockchain Technology:** This can serve as a secure and transparent platform for verifying credentials and maintaining accreditation records. It can enable instant verification of qualifications, certifications and licenses; ensure authenticity and integrity of accreditation data, etc.
- **Artificial Intelligence (AI):** AI-powered algorithms can be used to automatically survey big databases, identify inconsistencies, anticipate increasing risks, provide warnings about high-risk areas, etc. This will streamline

A survey jointly conducted by the International Organization for Standardization (ISO), ILAC and IAF revealed that 91.5% of respondents agreed or somewhat agreed that the increased use of remote techniques and the willingness to change will provide a stimulus to new audit/assessment/evaluation processes. The Report for IAF/ILAC/ISO Survey on Remote Audit/Assessment/Evaluation (Reference Report), 2021 further showed that a significant majority prefer remote or blended audits, assessments and/or evaluations. The respondents cited many benefits like reduced travel time and costs, efficient use of time during assessment and a reduced carbon footprint.

With over 4000 responses from a cross-section of the conformity assessment community, there was a clear trend that remote activities provided as much confidence as those conducted on-site, and as a result will likely see continued - or even an increased use - of remote activities in the future.

While the survey provided a point-in-time snapshot of attitudes towards the use of remote techniques, it also gathered a wide range of suggestions, ideas and proposals from users, CABs, auditors and assessors. Members of the global quality infrastructure are working together to consider how to incorporate the feedback in the relevant documents and processes in order to improve how technology can be deployed for more effective audit outcomes.

A 'Time for trust: How Blockchain will Transform Business and the Economy' global survey by PricewaterhouseCoopers (PwC) reported that whilst over 80% of respondents already had some involvement in blockchain technology, nearly half believed that regulatory uncertainty and a lack of trust amongst users were the biggest barriers to adoption. The survey also revealed concerns about a potential lack of standardisation and interoperability between blockchains.

the evaluation of accreditation criteria, increase accuracy and consistency, enhance risk assessment and improve decision-making. Intelligent chatbots can also assist stakeholders with inquiries and provide real-time support during the accreditation process.

- **Internet of Things (IoT):** This has the ability to enable real-time monitoring and tracking of equipment, processes and facilities. IoT devices can provide accurate and continuous data on various parameters, ensuring compliance with accreditation standards and facilitating proactive maintenance and quality control.
- **Augmented Reality (AR) and Virtual Reality (VR):** These emerging technologies can enhance training and assessment experiences by creating immersive simulations, virtual training environments and interactive assessments, thus improving the overall effectiveness and engagement of accreditation processes.

However, like all good things, the emerging technology presents its own share of new risks and challenges. In the current phase, many of the above technologies are weighed down by bias, misrepresentations, erroneous conclusions, etc. Data privacy, confidentiality, cyber security and the possibility of frauds are a looming menace for all organisations. Technological glitches are part and parcel of the developments, not to mention ethical issues that continue to surface by the day.

The Other End of Things

In this science and technology-driven era, as the adoption of new tools and expertise increases across industries, the world is looking for trust in the emerging innovations. However, how can the accreditation bodies (or even the conformity assessment bodies) be expected to inspire confidence in the novel technological systems when they themselves are unversed with the same?

Indeed, there are extraordinary advances in various fields – like automation, big data, modelling, connected equipment and other technologies - and the organisations will seek accreditation for them. Therefore, both the conformity assessment bodies and the accreditation programmes have to adapt to these new technologies to be able to assess and validate the areas where they are being applied so as to deliver confidence in their quality and safety.

India has to look at developing its accreditation system in a way that it eliminates duplication of effort, saves money and increases competitiveness in both the domestic and global markets.

In this context, it should be noted that accreditation does seek to revolutionise itself in tune with the changing times, however, it is slowed down by regulatory burdens and bureaucratic expectations which keep it from breaking out with innovatory success. Micromanaging accreditation through law and regulation has to come to an end immediately!

Conclusion

Adopting the latest technology will benefit both the accreditation bodies and the organisations/individuals seeking accreditation. It can streamline processes, lower the time involved, reduce administrative burden, create a chain of traceability and increase effectiveness. Finally, there is no denying that new trends should and will continue to shape the future of accreditation; Smart Quality Infrastructure will be the face of tomorrow!

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UPDATE ...

Moving a Step Ahead

Update on the April edition on

Vision-2030 Quality & Affordable Healthcare for All – Telangana

Health Insurance Vision 2030 – Quality & Affordable Health for All

Chief Guest Dr. Tamilisai Soundarajan, Hon'ble Governor of Telangana lighting the lamp

DAY 1: INAUGURAL CEREMONY

THE FEDERATION OF Telangana Chambers of Commerce and Industry (in partnership with Royal Sundaram General Insurance Ltd, United India Insurance Company Limited, Sudhakar PVC Products Pvt. Ltd, Patient Safety and Access Initiative of India Foundation, Healthy You Foundation, Consumer Online Foundation, The Aware Consumer, Administrative Staff College of India and Red Cross Society of India) hosted a two-day summit on Health Insurance Vision 2030: Quality and Affordable Healthcare for All on 21st and 22nd April, 2023.

The summit was the first of its kind, bringing together government officials, policymakers, insurers, distributors, hospital owners and policyholders to develop innovative, patient-centric health insurance schemes and products that increase accessibility, affordability and penetration of health insurance.

The summit was inaugurated by Hon'ble Governor of Telangana, Dr. Tamilisai Soundararajan and Smt. S N Rajeswari, Member (Distribution), IRDA. Also present were Mr. Anil Agarwal, President, FTCCI; Prof. Bejon Kumar Misra, Chair of Health Insurance Vision 2030; Shekhar Agarwal, Chair of the Healthcare Committee; Senior VP of FTCCI Meela Jayadev; Vice President Suresh Kumar Singhal; Secretary Veena and Deputy CEO Sujatha.

During the inaugural session, Mr. Anil Agarwal spoke about how the Federation realised the importance of 'Health for All' during the pandemic and has taken initiatives to address gaps in healthcare delivery by creating a document on 'Vision 2030: Quality and Affordable Health for All' in Telangana.

Governor Soundararajan emphasised the importance of healthcare reaching everyone by saying, “Calculating calories is as important as calculating currency” and urged people to take medical check-ups seriously. She highlighted the importance of a healthy lifestyle and the need for health insurance cover. She commended the efforts behind the development of Document Vision 2030: Quality & Affordable Health for All.

The Guest of Honour Smt. S N Rajeswari highlighted the growth of health insurance in India and the need to simplify the process and build a robust grievance redressal mechanism.

Prof. Bejon Kumar Misra hailed the need for providing a mandatory standard in terms of healthcare to the patients while lauding the world-class health facilities available in Hyderabad. He expressed the hope to develop a vibrant vision document in association with all the stakeholders!

The event also included panel discussions on 'Reforms Required in the Healthcare Insurance Delivery System', 'How to Further Improve Government-Driven Health Insurance Reach', 'Role of Intermediaries and Technology Providers to be More Customer-Friendly' and 'Modernising Customer Grievance Redressal Mechanisms to Assure Customer Delight'.

DAY 2: ROUND TABLE DISCUSSION

The summit concluded with a round table discussion involving government officials, CEOs and heads of various stakeholders. Prof. Bejon K Misra, Chair of Health Insurance Vision 2030, shared that after due deliberations, the summit firmed up nine recommendations, which will be incorporated into the Vision Document that is expected to be ready in the next three months.

Some of the key recommendations is the establishment of a Clearing House to create evidence of any kind of breakdown in the healthcare delivery system. The body will conduct research and studies on the barriers to access and affordable healthcare in Telangana State. Another recommendation is to work on developing standards for all stakeholders in the healthcare ecosystem. Additionally, a Cost Account Committee will be constituted to work on developing a unique model for cost accounting in healthcare.

YOUR OPINION MATTERS

letters to the editor

We are truly humbled by the praise and acknowledgment that is flowing in from varied sources. Please feel free to send in your comments, views or feedback on The Aware Consumer magazine at bejonmisra@theawareconsumer.in – we will publish your opinions and implement your feedback while ensuring that your voice is heard on the right platforms.

(April issue: Vision - 2030 Quality & Affordable Healthcare for All – Telangana)

We would like to extend our sincere congratulations for the outstanding April 2023 edition of the Aware Consumer Magazine, titled 'Vision 2030 - Quality and Affordable Healthcare – Telangana'. Prof. Misra's viewpoint on the patient-centred approach, Prafull D Seth's on Sustainable Developmental Goals, the contributions of the Government of India and Government of Telangana, their achievements & challenges and how we are enhancing the public healthcare quotient in India, was truly commendable.

We were particularly impressed by the articles of Mr. Pyush Misra on the New Landscape for Insurance Sector, Health Insurance and Challenges, IRDAI's Redressing of Grievances by Payal Agarwal, Lifestyle Medicine by Dr. Bhattacharya, and AYUSH & Health Insurance by Bina Jain in addition to FTCCI's Patient-Centric Healthcare Goals and Objectives.

The in-depth research and study, large number of statistics and database provides valuable insights and has made this edition as a ready reckoner, an information bank, a reference book and a handbook for all stakeholders in the healthcare industry.

We commend you for your yeoman service in creating awareness and promoting Healthcare for All in Telangana. Your efforts are truly an inspiration to all.

We would be grateful if you could consider publishing a magazine on healthcare every year, as we believe it would be a valuable resource for the entire nation.

Once again, we offer our highest appreciation and best wishes to you and your most dedicated team for the continued success.

– ***Anil Agarwal*** *President, FTCCI, Hyderabad*

I am a Kashmiri Pandit. My late father and his forefathers were Rajguru of Alwar state in Rajasthan. I am a big fan of Prof Bejon Misra and admire him since many years. I met him a long time ago in a seminar at New Delhi.

I read The Aware Consumer and have subscribed for a year as it is very informative and useful for all consumers. I will also try to spread information about the magazine among my family, friends and other circles so that they too read it and can benefit from the storehouse of material you are presenting every month.

– ***Rajguru Dr R S Tak,*** *Jaipur*

It is amazing to work with the Editor of THE AWARE CONSUMER Prof Bejon Kumar Misra. I could never imagine that such a comprehensive magazine will be published on the Healthcare Vision 2030 at such a sort time. Every page is full of wisdom and thought proving content, nicely woven into a beautiful fabric. I congratulate the editorial team and wish to put on record my appreciation on behalf of FTCCI and the members of the Healthcare Committee.

– Shekhar Agarwal, *Hyderabad, Past President and Chair of Healthcare Committee, FTCCI*

THE AWARE CONSUMER magazine is like a resource kit. Every edition when I read has taken me to the next level of awareness as a citizen-consumer. The April edition on Vision-2030 Quality & Affordable Healthcare for All - Telangana has not only empowered me with the solutions to Universal Health Coverage but has also made me an aware citizen. I shall always continue to read The Aware Consumer magazine and look forward for the next edition.

– ***Dr. Sanjana,*** *Hyderabad*

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Posted at Lodi Road HPO, New Delhi on 9-10th of every month
Published on 6th of every month

RNI No. DELENG/2015/67140
REG. NO. DL (S)–17/3523/2017-19