

Lab Accreditation System

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About NABL

- Established with objective to provide Govt. and Industry with a scheme for third-party assessment of laboratories.
- NCTCF Program started in 1981 in DST.
- Gov adopted a new policy on economic liberalization in 1991.
- Renamed as NABL & aligned to International Std. in 1993.
- Cabinet Decision to registered as an Autonomous Body under the Societies Act.
- Registered as Society in August 12, 1998.

NABL Operations

- ⇒ Accreditation program in accordance with requirements of ISO/IEC 17011: 2004.
- ⇒ Testing and Calibration accredited by NABL, complies with ISO/IEC 17025: 2005.
- ⇒ Medical Laboratories accredited by NABL, complies with ISO 15189: 20012.
- ⇒ Proficiency Testing Provider accredited by NABL, complies with ISO/IEC 17043: 2010.
- ⇒ Reference Material Producers (RMP) accreditation as per ISO Guide 34: 2009.

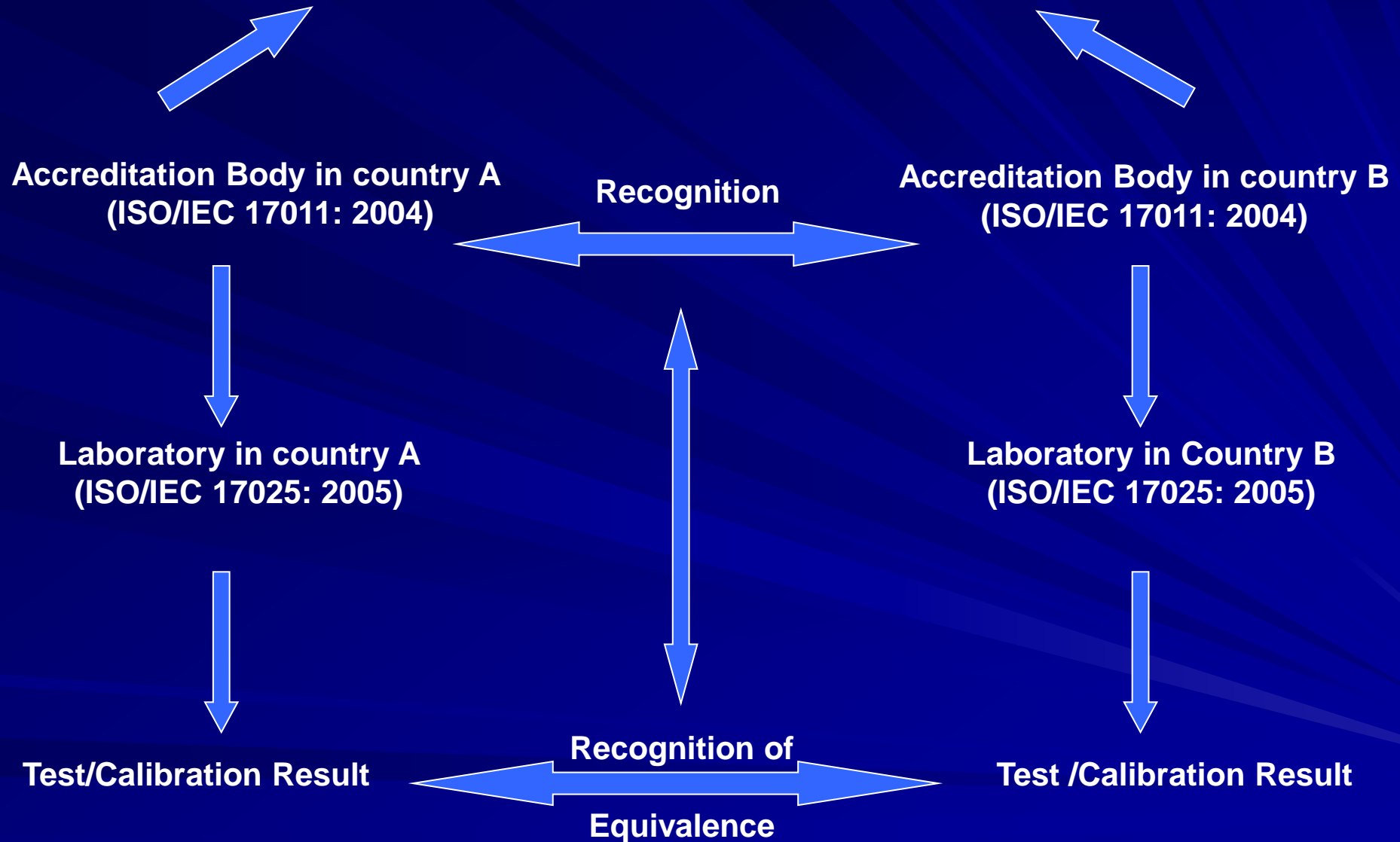
Global Scenario

- Results issued by NABL Accredited Lab are acceptable amongst 87 economies (signatories to ILAC MRA).
- NABL Accredited Laboratories are members of Global family of more than 40,000 accredited laboratories.
- NABL has emerged as the second largest laboratory Accreditation Body (after China).

MRA Signatory Status

- ⇒ Signatory to Mutual Recognition Arrangement (MRA) since the year 2000:
 - Asia Pacific Laboratory Accreditation Cooperation (APLAC)
 - International Laboratory Accreditation Cooperation (ILAC)
- ⇒ Re-evaluated in 2004, 2008 and 2012, signatory status was re-affirmed.
- ⇒ Next re-evaluation of NABL is due in 2016.

Peer Evaluation Process (ISO/IEC 17040: 2005)



Acceptance of Results (issued by NABL Accredited Labs) by Govt. & Regulators

- CGHS and Government Hospital Laboratories
- Bureau of Energy Efficiency (BEE)
- Food Safety & Standards Authority of India (FSSAI)
- State Electricity Boards (SEB's)
- Agricultural & Processed Food Products Export Dev. Authority
- Telecom Engineering Centre (TEC)
- Central Pollution Control Boards (CPCB)
- Export Inspection Agency (EIA)
- Tea Board, Coffee Board, Spices Board etc.
- Judiciary relies on Accredited Forensic Labs

- Central Public Work Department (CPWD)
- Ministry of Defence (MoD)
- Delhi Metro Railway Corporation (DMRC)
- Police Department
- Ministry of Agriculture
- Department of Weights & Measures (Legal Metrology)
- Ministry of Drinking Water and Sanitation (MDWS)
- Insurance companies rely on reports of Medical Labs

And many more.....

Metrology & Accreditation

Metrology is often divided into 3 sub fields

- Scientific & Fundamental Metrology
- Applied & Industrial Metrology
- Legal Metrology

BIPM, OIML, ILAC & ISO endorse following recommendations in order to rely on global acceptability of calibration to be performed:

1. In NMI which shall be normally signatory to CIPM-MRA & CMC published in the relevant areas of the KCDB Or
2. In NABL accredited lab (signatory to APLAC/ILAC arrangement)

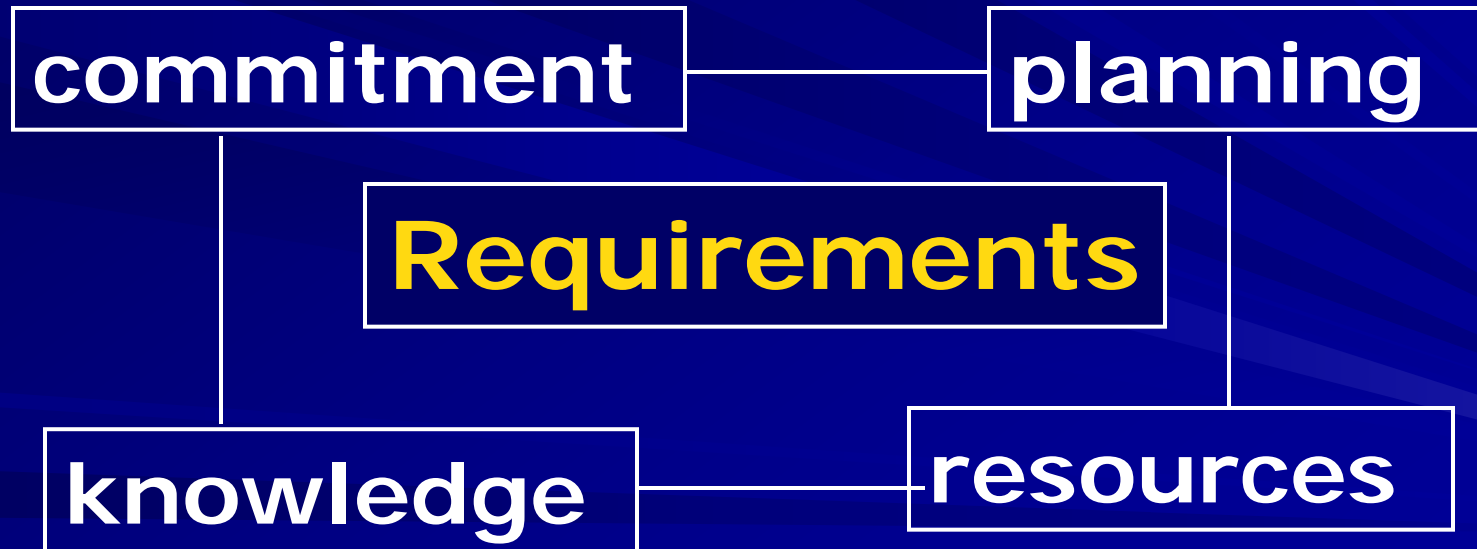
- NMI works with AB to determine the requirements for the best practice for a broad range of measurement laboratories.
- Experience of NMI's own laboratories to share for practical understanding of the process involved.
- NMI has leadership role in reliable measurement which meets requirements of public policy expressed in regulations.

Metrology & Accreditation

- Measurement uncertainty reported with certificate shall follow the principles established in GUM/ISO Guide 98
- Results of measurement made in accredited laboratory shall be traceable to SI units of measurement
- The above principle should be used wherever there is a need to demonstrate the metrological traceability for the purpose of international acceptability.

Process for Accreditation

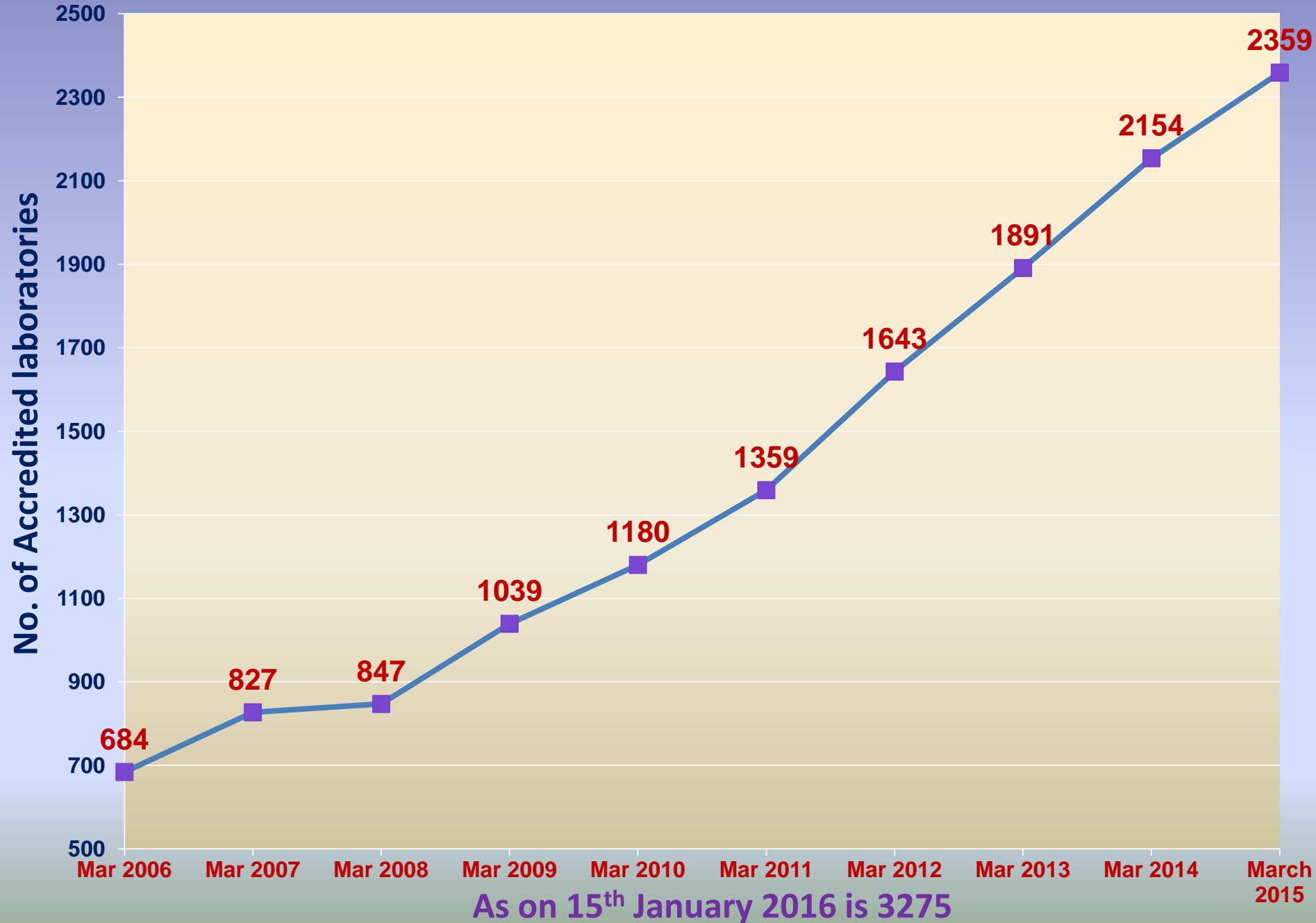
not one to be taken lightly
or without forethought



Scope of NABL Accreditation - Labs

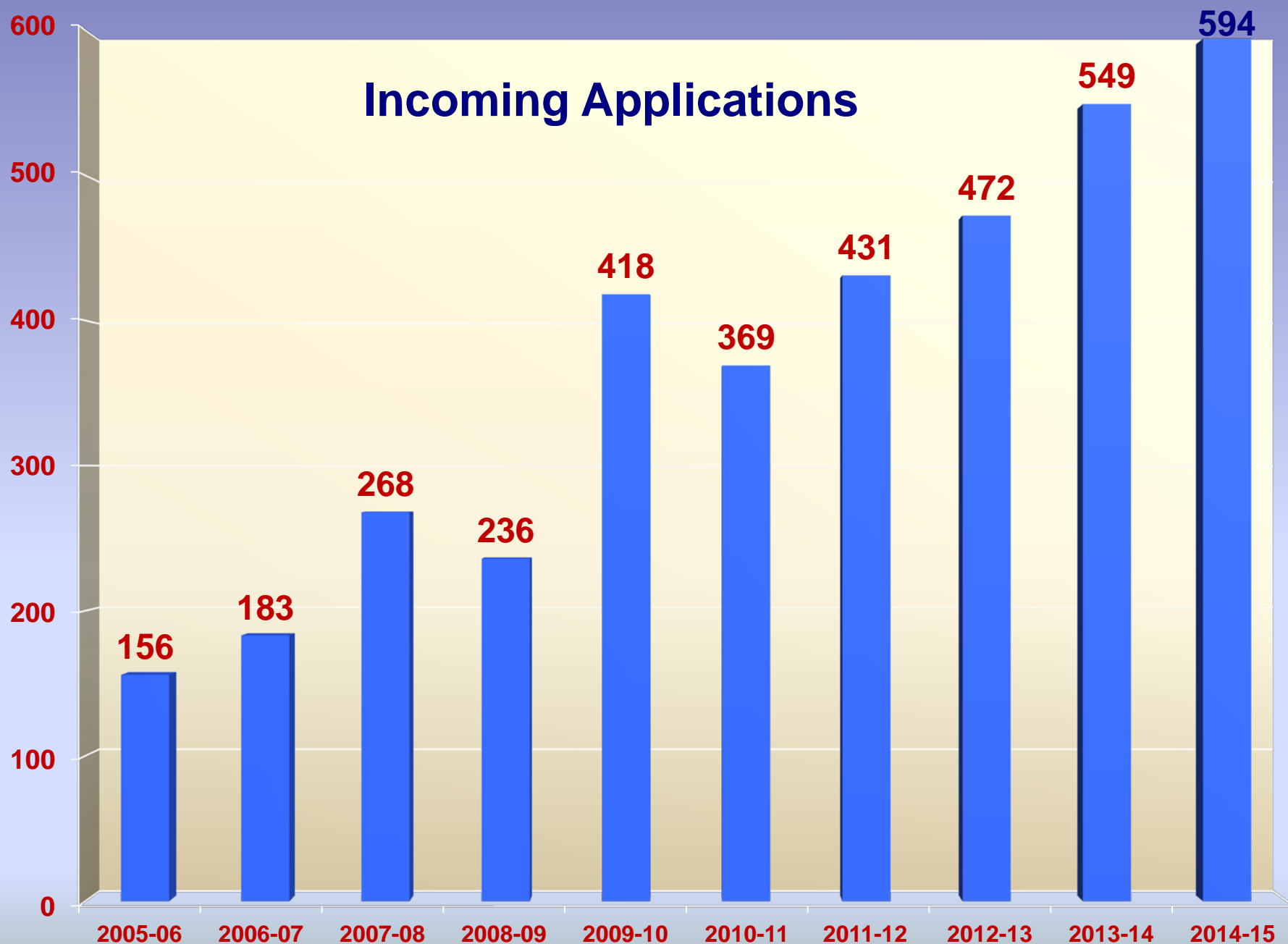
<u>Calibration</u>	<u>Testing</u>	<u>Medical</u>
Electro-technical	Biological	Clinical Biochemistry
	Chemical	Clinical Pathology
Mechanical	Electrical	Cytogenetics
	Electronics	Cytopathology
Radiological	Fluid-Flow	Haematology &
	Mechanical	Immuno-haematology
Thermal	NDT	Histopathology
	Optical &	Microbiological &
Optical	Photometry	Serology
	Radiological	Nuclear Medicine
Fluid-Flow	Thermal	(in-vitro)
	Forensic	

Growth of Accredited Labs



No. of Laboratories

Incoming Applications



Since April 2015 till 20th January 2016 NABL has received 531 applications

Grant of Fresh Accreditation (FY Wise)



Since April 2015 till 15th January 2016 NABL has granted 410 fresh Accreditation

Proficiency Testing Programs

■ NABL-NPL Proficiency Testing (PT) Programs

- ❖ NPL has conducted 48 PT programs in calibration as per MoU signed between NABL and NPL.
- ❖ For another MoU, discussion is underway.

■ APLAC Proficiency Testing Programs

- ❖ APLAC offers PT programs to its MRA signatory partners.
- ❖ Each member can nominate max. 4 labs in each program.
- ❖ NABL has participated in most of the (98) PT programs.

PT Provider Accreditation (ISO/IEC 17043: 2010)

- **2011** – Program launched
- **19** Applications received
- **11** PTP accredited
- **03** Assessors Training Course organised
- **63** Assessors Trained.

New Areas of Accreditations

Reference Material Producer (RMP) Accreditation-ISO Guide 34

Program initiated in collaboration with PTB Germany

- ❖ **2014** – Program launched
- ❖ **05** application received
- ❖ **02** RMP accredited
- ❖ **02** Assessors Training Course organised
- ❖ **40** Assessors Trained

Awareness Program & Conclave on Accreditation

- ❖ More 150 awareness programs across the country
- ❖ Collaborating partners: CII, FICCI, CMAI, State Govt. Departments, Scientific Institutions etc.
- ❖ World Accreditation Day (WAD) on every 9th June partnering with QCI
- ❖ Lab Conclaves with CII (Delhi, Bangalore, Pune)
- ❖ Assessor's Conclave & Calibration Lab Awareness Programmes in 4 regions across the country
- ❖ Assessors Conclave for Medical and Testing fields happening now.

Participation in International Activities & Relations

SAARC Region Cooperation with support of PTB, Germany

- Supports the accreditation activities of SAARC region particularly for Nepal, Bangladesh, Sri Lanka and Bhutan.
- Accredited 15 Laboratories
- 6 Assessor Training Programs for Nepal, Bangladesh & Sri Lanka
- MoU with Bhutan and MoU with NBSM (Nepal)
- Participation in SAARC Activity Meets

Cross-Frontier Accreditation

- ❖ Other Accreditation Bodies (AB's) of World have accredited labs in India (PJLA, UKAS, COFRAC, A2LA, IAS, SAS)

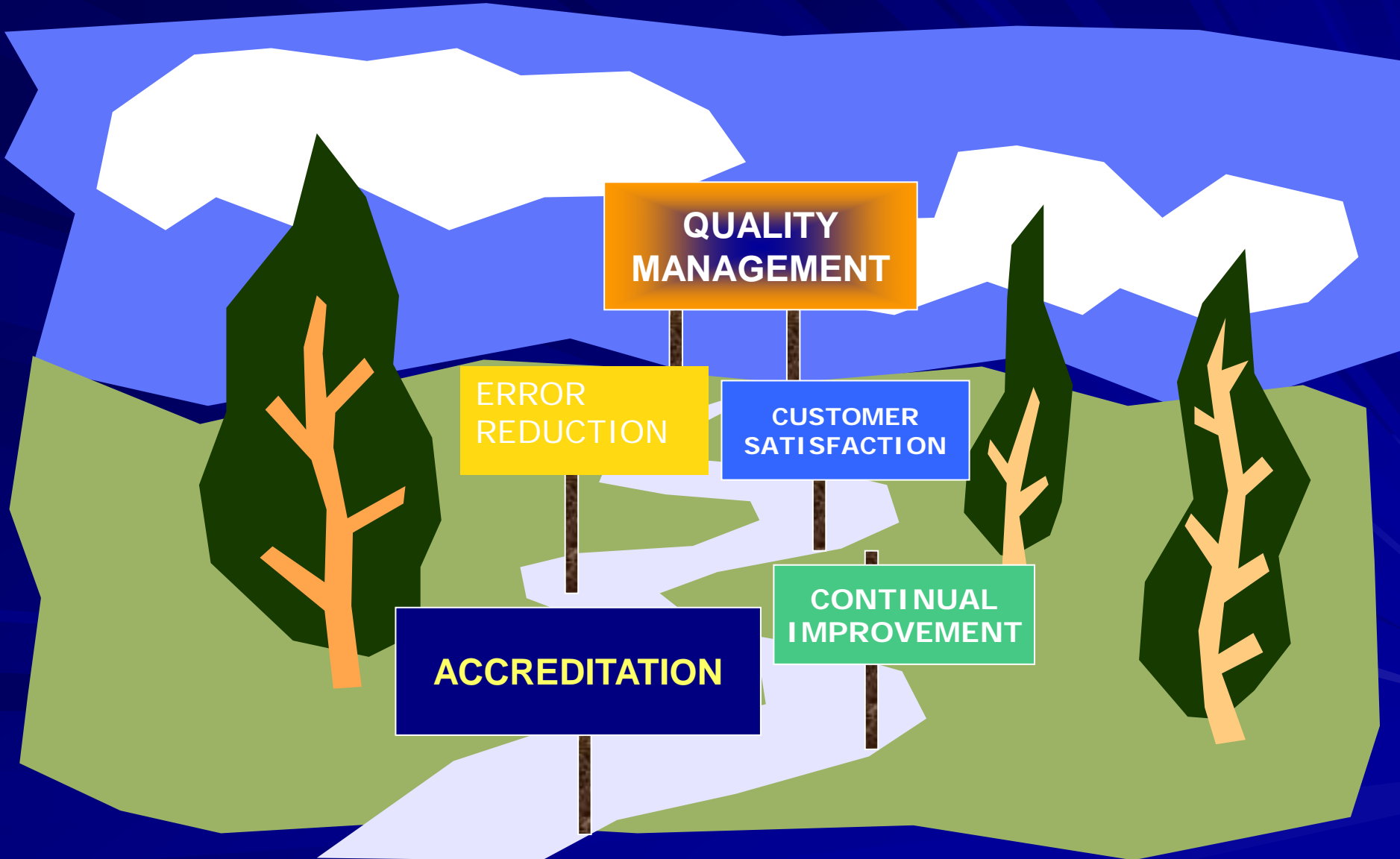
International Workshops / Conferences / Evaluations

- ❖ NABL officers widely participates in APLAC, SAARC, ILAC, WADA, EURACHEM and ISO/CASCO meetings/conferences
- ❖ 7 NABL officers are APLAC Evaluators and have participated in evaluations of other Accreditation Bodies across the globe

Challenges in CEMS Accreditation

- > Measurement Traceability
- > Competency & Training
- > Measurement Uncertainty
- > Regulators & Regulations
- > Data Acquisition System
- > Device Certification

Accreditation does not *guarantee* success,
it's only **one step** along the quality journey



THANK YOU

We are available at *info@nabl-india.org*