

APLAC is an organisation of laboratory accreditation bodies in the Asia Pacific area that have expressed a desire to cooperate in fostering the development of competent laboratories in member economies.

Cooperation is to include:

- Exchange of information
- Joint training programs
- Proficiency testing
- Harmonisation of requirements
- Mutual recognition of systems meeting harmonised requirements

APLAC NEWS NOTES is published six times a year to facilitate the exchange of information among members and interested parties. It is not copyrighted and may be reproduced in full. Excerpts should reference APLAC News Notes specifically. Wide copying and distribution are encouraged.

APLAC also maintains an Internet site at:

www.aplac.org

Secretariat for APLAC:

National Association of Testing Authorities (NATA)
71-73 Flemington Road
North Melbourne VIC 3051
Australia
Telephone: +61 3 9329 1633
Fax: +61 3 9326 5148
Email: aplac@nata.asn.au

This issue is published by:

National Accreditation Board for Testing and Calibration Laboratories (NABL)
B-4 Apartment, Qutab Hotel
New Mehrauli Road
New Delhi – 110 016 (INDIA)
Tel: +91 11 26529718 - 20, 26526890
Fax: +91 11 26529716
Email: director@nabl-india.org
Website: www.nabl-india.org

The next issue will be published in **February 2005** by IANZ, New Zealand.



NABL

National Accreditation Board for
Testing and Calibration Laboratories

LABORATORY ACCREDITATION IN INDIA

A Brief History

Department of Science & Technology (DST) under Government of India initiated the laboratory accreditation activities for testing and calibration laboratories in 1981 with the intention to provide official recognition to competent laboratories to carry out specific test(s) and/or calibration(s). It was then envisaged that accreditation program will assist industries seeking reliable testing and calibration facilities and will serve to enhance the quality and reliability of Indian goods, both in domestic and international markets. Accordingly National Coordination of Testing & Calibration Facilities (NCTCF) was setup in 1982 by DST as a scheme for accreditation of laboratories in India. India's national metrology institute, National Physical Laboratory (NPLI) cooperated with NCTCF in accreditation of calibration laboratories. NCTCF then used ISO/IEC Guide 25 : 1978 as the standard for accreditation and laboratories in 175 different fields of testing and calibration were accredited under this program.

The world economy has experienced sweeping changes through globalization and Indian economy has also undergone a transformation since early 1990s after India became a signatory to WTO. The Government of India recognized the importance of economic liberalization and formed an Inter-Ministerial Task Force (IMTF) in 1992 to study the Quality Scenario in India.

Subsequently in 1993, NCTCF was re-named as National Accreditation Board for Testing & Calibration Laboratories (NABL). NABL then adopted ISO/IEC Guide 25 : 1990 as the criteria for accreditation of laboratories in India. NABL was later registered as society on 12th August' 1998 and is now an autonomous body functioning under DST.

Current Status of NABL Accreditation Program

With a view to facilitate its acceptance in regional and international MRAs, NABL since its inception is operated on the basis of current international Standards and Guides. NABL has implemented its accreditation program in accordance with ISO/IEC Guide 58. In addition NABL also complies with other requirements as laid down by APLAC and ILAC. NABL provides accreditation to the testing and calibration laboratories that conform to the standard ISO/IEC 17025 : 1999.

NABL Accreditation to laboratories is currently given in Biological, Chemical, Electrical, Electronics, Fluid-flow, Mechanical, Non-destructive, Photometry, Radiological, Thermal, Medical and Forensic fields to Testing laboratories, and Electro-technical, Mechanical, Fluid-flow, Radiological, Thermal and Optical fields to Calibration laboratories. Laboratories are assessed by qualified, competent and trained NABL empanelled assessors. NABL accredited laboratories undergo surveillance annually and re-assessment towards the end of the third year so that they continuously comply with the ISO/IEC 17025 and other NABL requirements. NABL currently has 326 testing laboratories accredited in 511 different fields of testing and 185 calibration laboratories accredited in 252 different fields of calibration. NABL has also extended its accreditation services to the laboratories of neighboring countries in the region. NABL has already accredited two laboratories in Bangladesh and few more applications from laboratories in Sri Lanka and Bangladesh are in the pipeline.

Accreditation by NABL is a voluntary program but in view of importance of accreditation for equivalence and reliability of measurements and to minimize

technical barriers to international trade, more and more laboratories now are voluntarily coming forward to seek NABL accreditation. Awareness on laboratory accreditation and acceptance of data from accredited laboratories in India has grown steadily over the last few years. Laboratories under various government departments and ministries are now being encouraged to seek NABL accreditation by their parent organizations. Bureau of Indian Standards, the standards body in India has made it a requirement for laboratories under its approval scheme to seek NABL accreditation.

NABL will be aligning its accreditation program in accordance with the requirements of the new international standard ISO/IEC 17011 : 2004 in year 2005. NABL has plans to complete this task before 31st December' 2005, the deadline fixed by ILAC for the implementation of this standard by accreditation bodies.

NABL currently operates its secretariat with 17 technical persons and 11 support staff.

Training Activities by NABL

NABL regularly conducts 5-day Assessor Training courses for training experts as assessors. NABL has till date conducted 34 such courses and currently has more than 500 trained assessors in various fields of testing and calibration on its empanelled list. In order to enable the laboratories to effectively implement ISO/IEC 17025 : 1999, NABL also conducts 4-day course on Laboratory Quality System, Management & Internal Audit for training laboratory personnel. NABL has till date conducted 114 such courses. Other courses organized by NABL include courses on Measurement of Uncertainty in different fields of testing and calibration and on Proficiency Testing for Nodal laboratories.

NABL had also conducted 3-day refresher courses based on ISO/IEC 17025 : 1999 for its empanelled assessors who were earlier trained on ISO/IEC Guide 25 during the implementation phase of ISO/IEC 17025 : 1999. Twelve such courses were

conducted during the implementation phase.

NABL also regularly conducts Assessor Conclaves in different parts of the country for harmonization of NABL empanelled assessors on issues relating to laboratory accreditation and NABL requirements. Three such conclaves were conducted in year 2004.

NABL conducted two Awareness Programs on importance of accreditation, one Assessors update workshop on ISO/IEC 17025 : 1999 and three Internal Auditor training courses for Mauritius Accreditation Service (MAURITAS) on invitation from the Ministry of Industry & International Trade, Republic of Mauritius in 2004.

Proficiency Testing Programs by NABL

Proficiency Testing was also initiated by NABL in 1996 in accordance with ISO/IEC Guide 43. NABL has initiated 83 Proficiency Testing programs till date for Testing Laboratories, out of which 60 have been completed and remaining 23 are ongoing. For Calibration Laboratories, 24 programs have been initiated, out of which 19 have been completed and remaining 5 are ongoing. Proficiency Testing programs for calibration laboratories are being conducted by NABL in co-ordination with National Physical Laboratory (NPLI). NABL applicant and accredited laboratories also participate in regional and international PT Programs including the PT Programs available from APLAC.

International Recognition of NABL

As an accreditation body, acceptance of NABL accreditation system in either national as well as international arena is a necessity in order to play its role as a facilitator of free trade. NABL is a full member of both ILAC and APLAC. NABL regularly takes part in activities of both ILAC and APLAC including participation in its annual meetings.

Based on APLAC evaluation of NABL accreditation program in July' 2000, NABL became signatory to APLAC MRA in October'2000 for Testing and Calibration laboratories. NABL also became signatory to ILAC MRA for Testing and Calibration

laboratories in November' 2000 on the basis of its signatory status to APLAC MRA.

Continuation as Signatory to APLAC MRA after APLAC Re-evaluation

To continue as a signatory to APLAC MRA, NABL underwent a re-evaluation by a four-member APLAC peer evaluation team led by Ms. JoAnne Dupont of SCC, Canada during 25th – 30th July' 2004. The other members of the team were Mr. Rob Oke from NATA, Australia, Ms. Panadda Silva from DMSc, Thailand and Mr. Hung-Chang Huang from CNLA, Taiwan. During this visit, apart from evaluating the accreditation system implemented by NABL, the team also observed re-assessment and surveillance of five testing laboratories and two calibration laboratories. NABL has since last evaluation extended its scope of accreditation to Forensic and Thermal testing, which were also included in the re-evaluation by APLAC.

Based on the re-evaluation report by APLAC evaluation team, the APLAC MRA Council in its recently held meeting at Hanoi, Vietnam in December' 2004 has recommended NABL to continue as a signatory to APLAC MRA for testing and calibration laboratories for a further period of 4 years and the next re-evaluation of NABL will be scheduled in 2008, the maximum interval allowed as per APLAC rules.

Support from National Metrology Institute

To ensure that measurements are traceable to international standards, appropriate standards in India are maintained at National Physical Laboratory (NPLI) and Bhabha Atomic Research Centre (BARC). NPLI was setup by Government of India as the National Metrology Institute (NMI) to establish, maintain and update national standards of measurement and calibration facilities for different parameters. NPLI has the responsibility of realizing the units of physical measurements based on International System (S.I. units). Apart from maintaining the seven SI

base units, NPLI also maintains SI supplementary units and a host of other derived units for measurements. NPLI is also a signatory to BIPM MRA. BARC is an associate NMI for radiation standards and provides traceability for radiological measurements.

NABL maintains a strong working relationship with National Physical Laboratory (NPLI) through a) participation of NPLI experts as NABL assessors and committee members, and b) conduct of Proficiency Testing programs for which a formal MoU has been signed with NPLI.

NABL Preparing for Accreditation of Medical Testing Laboratories based on ISO 15189

In response to the need for accreditation of Medical Testing Laboratories based on new international standard ISO 15189 : 2003, NABL has already constituted a technical working group for preparing specific criteria based on this new standard. Two persons from NABL have participated in APLAC ISO 15189 Workshop held in Taiwan in July' 2004. NABL is now in the process of conducting Training Programs based on ISO 15189 : 2003 for NABL empanelled assessors in the field of Medical Testing. NABL intends to commence accreditation of Medical Testing laboratories based on ISO 15189 : 2003 in year 2005.

NEWS FROM APLAC MEMBERS

A2LA (USA)

Frederick based American Association for Laboratory Accreditation receives green light to expand services

FREDERICK, Md. (November 18, 2004) – The American Association for Laboratory Accreditation (A2LA) is expanding its services with the launch of its Inspection Body Accreditation Program.

“A2LA has long been a leader in evaluating testing laboratories across a wide variety of industrial settings, including the automotive and aerospace

industries, food safety and environmental testing,” said A2LA President Peter Unger. “Now we can apply our expertise in reviewing the operations of inspection bodies beyond the laboratory environment and into the vast array of inspections of products and services.”

A2LA recently completed the revision of their accreditation requirements documents to meet newly updated standards under the International Standards Organization’s (ISO) requirements for inspection body accreditations. The inspection bodies eligible for the newly revised A2LA program include food, vehicles, elevators, pressure vessels, buildings/structures, bulk products, welds, electrical equipment and textiles to name a few. Inspection body accreditation demonstrates that an inspection body (IB):

- is technically competent to perform specific inspections or specific types of inspections;
- has a quality system that is documented, fully operational, and addresses and conforms to all elements of *ISO/IEC 17020-1998 General criteria for the operation of various types of bodies performing inspection*;
- is operating in accordance with its own quality system;
- and conforms to any additional requirements of A2LA (such as the A2LA Policy on Measurement Traceability) or specific fields or programs necessary to meet particular user needs.

Free markets and open trade depend upon inspection bodies to ensure that products and services perform as needed, explained Unger. “In a highly complex and technical world, we take for granted that our food is safe to eat, that the products we buy meet safety requirements, that our cars and computers and cell phones will work,” he said. “It has only been over the last 100 years or so that equipment, products and services are consistent whether you’re in Boston or Baton Rouge.

IAJapan

"Inspection services are a vital component of commerce between businesses and with individuals and A2LA's Inspection Body Accreditation Program offers an additional layer of scrutiny and security," said Unger.

Inspection bodies can realize a market advantage by pursuing accreditation under the new program. In some cases, a state or federal government agency may require oversight of an inspection body, or an industry may require accreditation by suppliers.

A2LA intends to have this program included in the next mutual recognition arrangement (MRA) evaluation by the Asia Pacific Laboratory Accreditation Cooperation (APLAC) in 2006. Successful completion of the MRA evaluation would give international recognition to A2LA accredited inspection bodies.

Applications for accreditation can be found on the A2LA web site at www.A2LA.org or by contacting A2LA directly at 301 644 3248.

The American Association for Laboratory Accreditation (A2LA) is a nonprofit, non-governmental, public service, membership society. The mission of A2LA is to provide comprehensive accreditation services for laboratories, inspection bodies, proficiency testing providers, and reference material producers. Services are available to any type of laboratory or inspection body, be it private or government. A2LA is the largest multi-discipline laboratory accreditation body in the United States, and the second largest in the world.

If you would like additional information on the A2LA inspection body accreditation program please contact Steve Medellin by phone at 301 644 3228 or by email at smedellin@a2la.org.

APLAC members in Japan, IAJapan, JAB, JCLA and VLAC* have organized Japan Laboratory Accreditation Cooperation (JLAC) to disseminate and to develop laboratory accreditation in Japan. JLAC has held seminars since 2002 and the third seminar, titled "International Trend and Technical Issues in Laboratory Accreditation", was held in November 2004, on 16 in Tokyo and on 18 in Osaka.

The six topics were presented in the seminar as below:

The keynote address, "The current situation on Japanese conformity assessment systems and expectation to testing and calibration laboratories", was delivered by Mr. KATAYAMA Hiromu, Director, Conformity Assessment Division, Industrial Science and Technology Policy and Environment Bureau, METI (Mr. IWASE Keiichi in Osaka). He introduced the revision of the Conformity assessment schemes in new Japanese Industrial Standardization Law to coordinate international rules. Finally he explained the expectation to accreditation bodies and laboratories, emphasizing the importance of accreditation in infrastructure for supporting the Nation's safety and security.



Mr. Wei Hao, Secretary General, China National Accreditation Board for Laboratories (CNAL) gave

an invited lecture, "Conformity assessment system and regulation in China". He outlined the conformity assessment system in China, then, introduced recent alignment to international standards in regulatory programmes, for example, CCC marking, and regulations on conformity assessment activities. He also gave information to foreign CABs about how to access to Chinese market.

Mr. Masaru Kurosawa (Mr. Hisashi HONJO in Osaka), from ANALYSIS CENTER Co., LTD, JAB accredited laboratory, gave an overview of new EC directives for chemical pollution in electric and electronic equipments and their technical issues in laboratories, "WEEE/RoHS and meaning of Laboratory Accreditation".

Mr. Yoshinobu UEMATSU from IAJapan summarized the results of "Regulator acceptance of accreditation survey" implemented by ILAC in 2002 and also introduced the result of the investigation carried out by IAJapan in 2002 on how to promote the regulator to accept the accreditation.

Mr. Atsuya MAEDA from VLAC introduced the Proficiency Testing among the EMC laboratories including development of an Inter-laboratory Comparison Generator for the PT.

Dr. Yoshinori TAKATA (Dr. Shozo ASADA in Osaka) from Japan Chemical Laboratory Accreditation introduced the internal quality control guide and technical issues in chemical analysis laboratories.

Over 400 people attended the seminar and most of them were assessors from the four accreditation bodies and staffs of accredited laboratories. Because some of them have entered or plan to enter into Chinese market, they are also interested in how Chinese government accepts the accreditation by foreign accreditation bodies and how to apply for accreditation in China. This seminar provided a very beneficial opportunity for participants to grasp the international trends on accreditation as well as an occasion to exchange information and opinions.



All the documents are available at <http://www.jlac.jp/> after six months.

- * IA Japan: International Accreditation Japan
- JAB: Japan Accreditation Board for Conformity Assessment
- JCLA: Japan Chemical Laboratory Accreditation
- VLAC: Voluntary EMC Laboratory Accreditation Center INC.

IANZ (NEW ZEALAND)

2004 ILAC Survey of Regulator Acceptance of Accreditation

At the 2004 ILAC-IAF General Assembly and Conference in Cape Town, a poster session provided delegates with an insight into the openness or restrictiveness of the acceptance of accreditation by regulators. Each ILAC Arrangement signatory was asked to provide the names of the regulators in their economy that accepted test results from accredited laboratories, as well as noting which of those regulators also accepted test results from signatories of the ILAC Arrangement.

The results were startling and the findings (below) were displayed in Cape Town.

General Acceptance of accredited test reports by Regulators

<u>Economy</u>	<u>Regulator Accepts Accreditation</u>	<u>Regulator Accepts MRA Partner Accreditation</u>
Australia	Yes	Usually yes
Chinese Taipei	Yes	Yes
Czech Republic	Yes	Yes
Denmark	Yes	Yes
Finland	Yes	Yes
Hong Kong	Yes	Yes
Israel	Yes	Yes
Italy	Yes	Yes
Netherlands	Yes	Usually yes
New Zealand	Yes	Yes
Singapore	Yes	Yes
Slovenia	Yes	Yes
Sweden	Yes	Usually yes
Switzerland	Yes	Yes
United Kingdom	Yes	Usually yes

Restricted Acceptance of accredited test reports by Regulators

<u>Economy</u>	<u>Regulator Accepts Accreditation</u>	<u>Regulator Accepts MRA Partner Accreditation</u>
China	Yes	Never
Japan (IA Japan, JAB and VLAC)	Some	Almost never
Korea	Some	Never
Thailand	Yes	Never
United States (A2LA and NVLAP)	Some	Almost never
Vietnam	Rarely	Almost never
Austria	Nil response	
Belgium	Nil response	
Brazil	Nil response	
Ireland	Nil response	
Lithuania	Nil response	
Norway	Nil response	
Portugal	Nil response	

Limited Acceptance of accredited test reports by Regulators

<u>Economy</u>	<u>Regulator Accepts Accreditation</u>	<u>Regulator Accepts MRA Partner Accreditation</u>
Canada	Some	Sometimes
France	Some	Sometimes
Germany	Some	Sometimes
India	Some	Sometimes
Indonesia	Some	Sometimes
Malaysia	Some	Sometimes
Slovak Republic	Yes	Not normally
Spain	Yes	Not normally

Although there may be many varied and complex reasons why regulators may not accept accreditation, it is clear that more work has to be undertaken in the area of regulator education.

ILAC currently has literature (also translated in to Chinese, Japanese, Spanish, Russian, and German) available on the ILAC website (www.ilac.org), in the “publication section” under “general information” written specifically to assist regulators understand the benefits of accreditation. **“How Does Using an Accredited Laboratory Benefit Government and Regulators?”** along with “Why Use and Accredited Laboratory?”, “Why Become an Accredited Laboratory?” and “The Advantage of Being an Accredited Laboratory” are available for all APLAC members to forward to regulators in their economies. Translation to other languages is encouraged.

IANZ will be repeating this survey on behalf of ILAC in the future. Some economies have asked that the first question (requires and accepts accreditation) be modified, as some regulators require accreditation as part of their acceptance

(i.e. answer “yes”), but do not accept accreditation alone as meeting their requirements (i.e. answer “no”). This will be taken into account in the next survey.

APLAC PUBLICATIONS LIST

Most of the following APLAC documents are available from the APLAC web site. They can also be emailed out by the APLAC Secretariat as PDF files.

Asia Pacific Laboratory Accreditation Cooperation Secretariat, 71 – 73 Flemington Road, North Melbourne, VIC 3051, Australia. Tel: +61 3 9329 1633; fax: +61 3 9326 5148; email: aplac@nata.asn.au

APLAC Mutual Recognition Arrangement Council		
APLAC MR 001	Issue No. 6, 08/04	Procedures for Establishing and Maintaining Mutual Recognition Agreements Between Laboratory Accreditation Bodies
APLAC MR 002	04/04	Asia Pacific Laboratory Accreditation Cooperation Mutual Recognition Arrangement (MRA) text
APLAC MR 003	Issue No. 8, 06/04	Application for Signatory Status in the APLAC Multilateral Mutual Recognition Arrangement (APLAC MRA)
APLAC MR 004	Issue No. 2, 08/03	APLAC MRA Council Working Group on Evaluation Performance – Policy and Procedures
APLAC MR 005	Issue No.1, 09/03	Procedure for Training of APLAC MRA Evaluators
APLAC MR 006	Issue No.1, 07/04	APLAC Procedure for the Conduct of Joint Evaluation with Another Region
APLAC Nominations Committee		
APLAC NC 001	Issue No. 3, 12/03	APLAC Nominations Committee and the APLAC Nomination Process
APLAC Proficiency Testing Committee		
APLAC PT 001	Issue No. 3, 03/03	APLAC Calibration Interlaboratory Comparisons
APLAC PT 002	Issue No. 4, 12/03	APLAC Testing Interlaboratory Comparisons
APLAC PT 003	Issue No. 4, 04/04	APLAC Proficiency Testing Directory
APLAC PT 004	Issue No. 3, 12/03	APLAC Measurement Audits
APLAC PT 005	Issue No. 1, 06/04	Artefacts for Measurement Audits
APLAC Public Information Committee		
APLAC PR 001	Issue No. 1, 01/01	APLAC Publications Numbering Policy
APLAC PR 003	Issue No. 2, 02/01	Procedure for Adoption of APLAC Documents
APLAC PR 007	Issue No. 12, 11/04	APLAC – Its Role and Structure – PowerPoint Presentation
APLAC PR 008	Issue No. 17, 12/04	International Recognition of Accredited Test and Inspection Reports
APLAC PR 009	Issue No. 5, 07/04	APLAC Procedures for Editors of <i>APLAC News Notes</i>

APLAC Secretariat		
APLAC SEC 001	Issue No. 3, 12/02	APLAC Memorandum of Understanding
APLAC SEC 004	Issue No. 4, 12/03	APLAC Rules of Procedure
APLAC SEC 009	Issue No. 54, 12/04	APLAC Publications List
APLAC SEC 017	Issue No. 9, 06/04	APLAC Application for Membership
APLAC SEC 020	Issue No. 41, 11/04	APLAC General Assembly Delegates List
APLAC SEC 021	Issue No. 17, 12/04	APLAC Board of Management Membership List
APLAC SEC 022	Issue No. 12, 08/04	APLAC Committee Chairs and Secretaries List
APLAC SEC 023	Issue No. 42, 11/04	APLAC MRA Council Membership List
APLAC SEC 026	Issue No. 9, 11/03	APLAC Nominations Committee Membership List
APLAC SEC 027	Issue No. 14, 08/04	APLAC Public Information Committee Membership List
APLAC SEC 028	Issue No. 17, 08/04	APLAC Proficiency Testing Committee Membership List
APLAC SEC 029	Issue No. 25, 09/04	APLAC Technical Committee Membership List
APLAC SEC 030	Issue No. 21, 09/04	APLAC Training Committee Membership List
APLAC SEC 035	Issue No. 29, 11/04	APLAC MRA Signatories List
APLAC SEC 036	Issue No. 2, 08/03	APLAC Complaints Handling Procedures
APLAC SEC 037	Issue No. 1, 02/01	APLAC Document Control and Document Format
APLAC SEC 038	Issue No. 17, 11/04	APLAC Membership Summary List
APLAC SEC 039	Issue No. 11, 11/04	APLAC MRA Signatories Summary List
APLAC SEC 040	Issue No. 4, 07/04	APLAC Procedure for Issuing Invoices for Annual Fees
APLAC SEC 041	Issue No. 3, 08/04	APLAC Guidelines for Hosts of the APLAC General Assembly and Associated Meetings (only available from the Secretariat)
APLAC SEC 042	Issue No. 2, 07/03	APLAC Code of Ethics for Laboratory and Inspection Body Accreditation Organisations
APLAC SEC 043	Issue No. 1, 10/02	APLAC Requirements for APLAC Funding Requests
APLAC SEC 044	Issue No. 2, 08/03	APLAC Procedure for Appeals and Alternative Dispute Resolution Process
APLAC SEC 045	Issue No. 2, 07/04	APLAC Procedure for Management Review and Internal Audits
APLAC SEC 046	Issue No. 1, 12/03	Guidelines for the Use of the APLAC Logo
APLAC SEC 047	Issue No. 1, 12/03	Processing Notification of Changes Within an APLAC MRA Signatory Organisation
APLAC SEC 048	Issue No. 1, 12/03	APLAC Register of Delegated Responsibilities
APLAC SEC 049	Issue No. 3, 08/04	Maintenance and Archiving of APLAC Files
APLAC SEC 050	Issue No. 1, 08/04	Guidelines for APLAC MRA Signatories When Accrediting Laboratories or Inspection Bodies Within the Economy of Another APLAC MRA Signatory

APLAC Technical Committee		
APLAC TC 002	Issue No. 2, 02/04	APLAC Internal Audits for Laboratories and Inspection Bodies
APLAC TC 003	Issue No. 2, 02/04	APLAC Management Review for Laboratories and Inspection Bodies
APLAC TC 004	Issue No. 2, 03/04	APLAC Method of Stating Test and Calibration Results and Compliance with Specification
APLAC TC 005	Issue No. 2, 03/04	APLAC Interpretation and Guidance on the Estimation of Uncertainty of Measurement in Testing
APLAC TC 006	Issue No. 1, 07/04	APLAC Guidance Notes on ISO/IEC 17020

APLAC Training Committee		
APLAC TR 001	Issue No. 1, 12/01	APLAC Guidelines on Training Course for Assessors