

# **Asia Pacific Laboratory Accreditation Cooperation (APLAC) Mutual Recognition Arrangement**

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## **1. Abstract**

The Asia Pacific Economic Cooperation (APEC) requires close cooperation among signatory economies and greater mutual recognition of conformity assessment activities. APEC is supported in this endeavor by the Asia Pacific Laboratory Accreditation Cooperation (APLAC). As a regional body, established in 1992, APLAC has taken a leadership role in establishing a good mutual recognition arrangement (MRA) protocol. APLAC has also initiated many training programs to ensure consistency in evaluation of its member accreditation bodies. With 28 full members and three associate members, APLAC hopes to become a strong regional arrangement, which will help ensure the success of APEC.

## **2. Background**

The moving force behind APLAC was John Gilmour, the former chief executive of the National Association of Testing Authorities (NATA), Australia. Based on the initiatives of Messrs. Gilmour and John Locke [former president of the American Association for Laboratory Accreditation (A2LA)], the organization got off the ground with the signing of an MOU (Memorandum of Understanding) in 1995 in Jakarta, Indonesia. This was followed by intense efforts to establish the rules of operation, which eventually culminated in the signing of the MRA in 1997. Although the cooperation was initially set up to establish an MRA for testing and calibration laboratories, its scope has been extended to include inspection bodies. As of November 1, 2001, there are 19 signatories to the APLAC MRA.

Based on the strength of APLAC's programs, signatories to the APLAC MRA were admitted, on November 2, 2000, to the International Laboratory Accreditation Cooperation (ILAC) MRA.

There is hope that with increased technical association between APLAC and the Subcommittee on Standards and Conformance (SCSC) of APEC, results from accredited laboratories within the APLAC family will form a strong underpinning for establishment of free trade in the Asia-Pacific region.

### **3. APLAC's Principle Role**

Given that laboratory accreditation to international standards is essential to promote barrier-free trade, APLAC, from its very inception, embraced ISO/IEC Guides 25 and 58 [1] and a set of operational rules (codified as document MR001 [2]) as the operational documents for its MRA. The following are some of APLAC's activities aimed at promoting free trade:

- Promotion of laboratory accreditation as a trade-facilitation tool.
- Assistance to developing accreditation systems.
- Recognition of competent test and calibration facilities in the APEC region.
- Cooperation with other regional laboratory accreditation bodies, such as EA, IAAC, SADCA.
- Establishment of strong links with the APEC Subcommittee on Standards and Conformance, and other APEC specialist regional bodies, such as APLMF, APMP, PAC and PASC.
- Establishment of an MRA for inspection bodies under ISO/IEC Standard 17020 [3].
- Maintenance of the APLAC role under ILAC as a regional cooperation body.

### **4. The APLAC Structure**

APLAC is governed by its General Assembly, which includes representatives of all full members of the cooperation. The General Assembly elects a Board of Management, the MRA Council and a Nominations Committee for the conduct of all APLAC elections. Under the Board of Management, four full committees operate, covering training, public information, proficiency testing and technical requirements. The APLAC Board of Management is responsible for operating the business side of the cooperation and ensuring that strong oversight is provided of all APLAC activities.

### **5. The APLAC MRA**

Each applicant to the APLAC MRA is subjected to a rigorous peer evaluation to establish compliance with ISO/IEC Guide 58 and APLAC's operational rules of procedure, MR001. APLAC requires that accredited laboratories comply with requirements of ISO/IEC Standard 17025 [4] and related documents. The evaluation criteria includes examination of not only the technical competence of an accreditation body, but its integrity, transparency, fairness, scope of accreditation and other related elements essential for a strong accreditation program. The APLAC MRA has not only successfully replaced numerous bilateral MRAs, but has also facilitated entrance of all APLAC MRA partners into the ILAC global arrangement. The APLAC and ILAC MRAs signify that a laboratory accredited by one MRA partner is recognized by the

other partners as being equivalent in competence to the laboratories which they themselves accredit.

To ensure that signatories continue to comply with ISO/IEC Guide 58 and APLAC MR001, each accreditation body is re-evaluated every four years to ensure that they continue to meet the requirements established by APLAC. In evaluating an accreditation body for fitness to join the APLAC MRA, particular attention is given to the measurement traceability system existing in the economy, including the link of the national metrology institute to BIPM. By operating several proficiency testing programs, APLAC has ensured that resources are available for continuous evaluation of capabilities throughout the Asia-Pacific region.

Since establishment and maintenance of a good MRA requires constant transfer of knowledge and upgrading of talent, APLAC has many training programs to create a pool of qualified evaluators and lead evaluators. These training programs are funded, for the most part, by regional trading blocs, such as APEC, or by one of the member economies belonging to the APLAC region.

## **6. APLAC MRA Evaluation**

The APLAC MRA Council assigns the lead evaluator for each of the bodies to be evaluated. The lead evaluator then has the responsibility for putting together his team of evaluators, drawn from an evaluator pool established by the signatory MRA partners. Individuals in the evaluator pool have all been successfully trained by the APLAC Training Committee. Applicants are offered a pre-evaluation visit, by the team leader and another evaluator, to review the applicant's accreditation program and advise the applicant as to their readiness for a full evaluation. A full evaluation generally involves a team of four, which may include a technical expert and technical evaluators. The team not only visits the headquarters offices of the applicant, but also travels extensively with the applicant's assessors to observe them conducting initial and surveillance assessments of laboratories. A report is also sought from the APLAC Proficiency Testing (PT) Committee on the performance of laboratories accredited by the applicant in the APLAC PT programs. The evaluation team also visits the national metrology institute to review the availability of measurement traceability to the BIPM. A report is prepared at the conclusion of the full evaluation, identifying the corrective actions needed. The in-depth report is based on a detailed study of the accreditation body and its practices. This report is reviewed by the full APLAC MRA Council, which then has the power to admit the applicant, or to require follow-up evaluations to confirm compliance of the applicant with all of the rules. Once admitted, an accreditation body is re-evaluated at least once every four years, although re-evaluations may occur sooner if there is some good reason.

## **7. Future**

The APLAC MRA has a solid future, since it has been recognized as a key tool of APEC via its Subcommittee on Standards and Conformance. The APLAC MRA will enhance acceptance of test data amongst the signatory economies. Because of its linkage to ILAC, the APLAC MRA does indeed assist in international recognition of accredited calibration and testing laboratories. The APLAC MRA reduces or eliminates the need for retesting of imported goods and helps ease

the development of barrier-free trade as contemplated by the Uruguay Round of negotiations under the WTO. As more and more economies join APLAC, greater recognition of good practices will emerge. Not only will this help in development of trade, but ultimately the APLAC MRA will support a strong quality system in the testing arena for all the member economies of APEC.

## **References**

1. International Organization for Standardization/International Electrotechnical Commission, ISO/IEC Standard 17025, "General Requirements for the Competence of Calibration and Testing Laboratories," 1999.
2. Asia Pacific Laboratory Accreditation Cooperation, MR001 "Procedures for Establishing and Maintaining Mutual Recognition Arrangements Amongst Accreditation Bodies," 2001.
3. International Organization for Standardization/International Electrotechnical Commission, ISO/IEC Standard 17020, "General Criteria for the Operation of Various Types of Bodies Performing Inspection," 1998.
4. International Organization for Standardization/International Electrotechnical Commission, ISO/IEC Guide 58 "Calibration and Testing Laboratory Accreditation Systems - General Requirements for Operation and Recognition," 1993.