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CAB/514/INF

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**INTERNATIONAL ELECTROTECHNICAL COMMISSION**

**CONFORMITY ASSESSMENT BOARD (CAB)**

**Meeting 16, Seoul, 2004-10-19**

**SUBJECT**

**Agenda items 9.3.3 and 9.4**

**Cooperation with ILAC and IAF – report to ILAC/IAF Joint General Assembly**

**BACKGROUND**

For some years the CAB Chairman has been invited to participate in and provide an update report to the ILAC General Assembly outlining those aspects of IEC conformity assessment activity of interest to ILAC members and focussing on the evolving cooperation with ILAC and its members.

This year, with attention now on cooperation with both ILAC and IAF, the invitation has been extended to participation in both the ILAC GA and the ILAC/IAF Joint General Assembly. After consultation with the Scheme secretariats the attached report has been submitted for inclusion in the agenda for the Joint General Assembly. Dr Clif Johnston will attend the Joint GA and make a verbal presentation. He will report to the CAB at the Seoul meeting on any matters arising from the ILAC/IAF meeting.

**ACTION**

**The CAB is invited to note the report.**



## **IEC/CAB Cooperation with ILAC and IAF**

### **A Report from the IEC Conformity Assessment Board**

#### **to the ILAC/IAF Joint General Assembly 2004**

Developing a cooperative working relationship with both ILAC and IAF is high on the list of the IEC Conformity Assessment Board's (CAB) priorities. With many common customers, working together has the potential to deliver significant benefits to each of the organisations as well as to their global customer base.

Building on the experience of the past few years, development of the CAB / ILAC relationship has accelerated over the last twelve months. The third meeting of the Joint CAB / ILAC Technical Panel was held in Geneva in June 2004 and the fourth meeting is planned for January 2005 in Sydney. An initial meeting of the Joint Working Group on "Developing a common understanding of ISO/IEC 17025" was held adjacent to the Technical Panel meeting and it too will hold its second meeting in Sydney. A significant number of Joint ILAC Member / IECEE laboratory assessments have been conducted. These very successful joint assessments have not only reinforced confidence in the ability of our respective bodies to work together but have been warmly received by the laboratories involved. Further joint assessments are planned including Joint ILAC Member/IECEX assessments for later this year. Both parties are in agreement that the relationship should be formalised by a Memorandum of Understanding and have reached substantial consensus on its content.

Initial steps have been taken to explore the possibility of an enhanced cooperation with IAF and its members. While each of the IEC Schemes takes some account of existing national accreditation in performing assessments, closer cooperation has the potential to lower costs and provide other benefits for our common customers.

The CAB is also cooperating with both ILAC and IAF in the work of the Joint ISO/ILAC/IAF Working Group established under the auspices of the ISO/ILAC /IAF Agreement. As a partner with ISO/CASCO in bringing conformity assessment related standards to the marketplace it is clearly important for the IEC/CAB to be working closely with the international conformity assessment community in the area of standards development.

#### **The IEC Conformity Assessment Schemes**

IEC conducts three globally recognised and accepted conformity assessment Schemes:-

- IECEE – The IEC System for Conformity Testing and Certification of Electrical Equipment, which includes the CB Scheme (Scheme of the IECEE for Mutual Recognition of Test Certificates for Electrical Equipment, including EMC) and the Full Certification Scheme (FCS)
- IECEX – The IEC Scheme for certification to standards for safety of electrical equipment for explosive atmospheres and
- IECQ-CECC - The IEC Scheme for quality assessment of electronic components

Under the oversight of the CAB, each of the Schemes is essentially autonomous, with country based membership and financing and governance by a management committee in which all members are entitled to participate. In the past membership was restricted to countries which are also IEC Members but the schemes are now open to participation by non-IEC Member countries.

The IECEE currently has 43 participating countries (Member Bodies), 60 National Certification Bodies and 175 testing laboratories. Annual growth of more than 20% has been a feature of the CB Scheme for many years and 2003 was no exception with growth of 23% in test certificates is-

sued. During the year 34 117 CB test certificates were issued and over 100 000 certificates are still current. Transfer of responsibility for photovoltaics to the IECEE became effective in 2004 and the first ever certificate issued under the FCS Scheme was for solar electric modules. The FCS is an extension of the CB Scheme and requires an assessment of a manufacturer's quality assurance program, type testing and a follow up surveillance consisting of periodic quality system audits and testing of samples in accordance with the benchmark ISO/IEC Certification System 5.

IECEx deals with specially designed equipment for use in areas where flammable liquids, gases and combustible dusts may be present, eg oil refineries, coal mines, grain handling, chemical processing. The Scheme commenced operations in 1999 with a facility for the issue of internationally recognised IECEx test reports, providing a "fast – track" to multiple national certification. The Scheme began to demonstrate its full potential in 2003 with the introduction of international IECEx certificates of conformity. It currently has 22 member countries (with the 23<sup>rd</sup> member country to be appointed early October 2004), 18 Ex certification bodies and 19 Ex testing laboratories, with a further 3 countries set to join and 6 more testing laboratories and certification bodies expected to be approved within the next year. Sale and use of products covered by the Scheme (known as "Ex equipment") is heavily regulated and an ISO Type 5 scheme requiring type testing, assessment and on-site audit of manufacturers and on-going surveillance is mandatory. Public access to IECEx certificates of conformity is available via the IECEx "on-line" certificate system on the IECEx Scheme website.

The IECQ-CECC emerged from the amalgamation in 2003 of the oldest of the IEC Schemes, IECQ, with the European CECC Group. The merged Scheme has 17 members with Supervising Inspectorates in 10 countries. The Scheme offers both product approvals over a range of electronic component categories and technology approvals, which result from an evaluation of a manufacturer's quality system and emphasises global openness with more than one Supervising Inspectorate being permitted in each country and the possibility of cross-border operation. Worldwide IECQ-CECC serves more than 450 manufacturers, suppliers and the like with both product approvals and technology approvals.

### **CAB / ILAC Cooperation**

The CAB/ILAC Joint Technical Panel has now met three times and the members have developed an increasing confidence in working together and in the effectiveness and competence of the different assessment procedures used by the two groups. Included on the recent meeting agenda were issues such as uncertainty measurement and accuracy, calibration, subcontracting, equipment lists, test report formats and use of manufacturers' laboratories. In many cases substantial agreement has been reached on a common approach, whilst others are still subject to discussion. Invitations have been extended to all members of the Panel to attend the respective laboratory committees of ILAC and the IEC Schemes. IECEE has invited ILAC members to nominate a limited numbers of individuals to participate in its assessor training programmes.

At an early stage it was recognised that a common approach to the interpretation and application of ISO/IEC 17025 would result in significant benefits to both parties as well as to their laboratory customers. The Joint Working Group established for this purpose met for the first time in June 2004 and substantial progress was made in clearing up misconceptions and in identifying areas where further clarification and discussion is needed.

Since the commencement of the trial of IECEE/ILAC Member joint laboratory assessments in 2003 a total of 12 assessments have been carried out in 8 countries and as a matter of routine further joint assessments are planned. IECEx has two joint assessments in the planning stage. All of the joint assessments have been conducted successfully and both the laboratories and the members of the assessment teams have been enthusiastic about the results.

A Joint Policy Panel has also been established and, although it has not been necessary to hold a formal meeting of this Panel, its members on both sides have been involved in discussion, particularly in connection with the development of the MoU.

The desirability of a MoU to formalise the CAB/ILAC cooperative relationship is a natural outcome of the confidence which has been established and the practical success of the cooperation. The text of the draft MoU has been approved in principle both by the IEC Schemes and by the CAB and it will be formally approved at the CAB meeting in Seoul on 19 October.

## **CAB / IAF Cooperation**

Development of a cooperative relationship with IAF has been on the CAB agenda for some time but to date action has been limited by the concentration on building the relationship with ILAC. In the past contact between CAB and IAF Officers has identified areas where cooperation could be mutually beneficial and this has been confirmed in recent discussions.

Both IECEE and IECEx include recognition of national accreditation as part of their procedures for assessment of certification bodies, with IECEx using national accreditation for surveillance purposes between its 5 year re-assessment programme. Recently IECQ-CECC instituted a pilot programme for assessment of Supervising Inspectorates in the USA, which is reliant upon acceptance of national accreditation and is carried out in cooperation with the national accreditation body.

Accreditation Bodies and the IEC Schemes both utilise ISO/IEC Guide 65 in their assessment procedures and developing a common interpretation and application of its requirements would be mutually beneficial as would the possibility, in the future, of undertaking joint assessments and/or using the results of each others assessments.

To more clearly identify the potential areas and establishing a basis for cooperation, it has been proposed that an ad hoc group comprising representatives from IAF and the IEC Schemes should be established. This proposal will be discussed at the CAB meeting in Seoul and, subject to the approval of both the CAB and IAF, the ad hoc group could meet within the next few months to commence its work.

## **Conclusion**

The substantial progress which has been made in practical application of the cooperation between the IEC Schemes and ILAC has delivered significant benefits to both parties and in particular, with the success of joint assessments, has delivered welcome benefits to our common laboratory customers. It is important that these benefits be increased by continuing to build on and extend the scope of the working relationship. While agreement on such issues such as "reciprocal recognition", "sharing of assessors" and the like may not be practicable at this stage they should remain on the agenda for future consideration.

The success of the CAB/ILAC relationship provides a model for building a CAB/IAF relationship with the capacity to deliver significant benefits to the global conformity assessment community and its customers. The CAB would welcome IAF Member support for this initiative.

The CAB recognises the considerable effort which has been expended in reaching the current state of the cooperation and expresses its appreciation to each of the ILAC, IAF and IEC representatives involved.

Don Gray  
IEC Vice President  
CAB Liaison with ILAC and IAF  
14 September 2004