CAB/317/INF

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

CONFORMITY ASSESSMENTBOARD (CAB)

SUBJECT **AGENDA ITEM FIRENZE 9.2**

Review of CAB/ILAC collaboration

BACKGROUND

Following the CAB/ILAC Workshop held in Geneva, 1999-05-20, a programme for further collaboration was agreed between the CAB and the officers of ILAC, document CAB/197/INF.
Reports on actions taken by the CAB and by ILAC to Implement the collaboration actions were presented to the CAB at the meetings in Geneva, May 2000, Stockholm, September 2000 and Geneva, May 2001.
At this last meeting the following decision was taken:

CAB Decision 15/2001
The CAB agreed to review the principles of collaboration with ILAC at the Firenze meeting in order to plan a consistent policy of co-operation of benefit to all bodies concerned.

This report summarizes collaboration so far.

ACTION

The CAB is invited to review this report for discussion in Firenze. Comments should be submitted via the technical server.

1. CAB/197/INF: Principles for further collaboration

Agreed actions:

Exchange of documents, (agendas, meeting reports), personal liaison between CAB chairman and M Peet, ILAC Executive Committee and between IECEE chairman and ILAC chairman.

Establish task force to investigate cooperation between ILAC and IECEE schemes at technical level.

2. CAB/212/R: Report on collaboration from May 1999 to May 2000, Geneva 2000 CAB meeting

Actions taken:

Exchange of documents between CAB and ILAC secretariats.
Personal liaison meeetings – CAB chairman/M Peet, IECEE chairman/ILAC chairman, email contact Secretary ILAC LLC and IECEE, IECEx.
Task force established: ILAC secretary, IECEE and IECEx secretaries
List of accredited labs in IEC schemes provided to ILAC
Exchange of information on qualification requirements for assessors
CAB invited to ILAC GM in Washington, Nov 2000.

3. CAB/251/R: Report on collaboration from May 2000 to September 2000, Stockholm 2001 CAB meeting

Actions taken

Exchange of CAB, ILAC/LLC meeting reports
Personal liaison meetings as above
Draft report on developing a common approach covering implementation of ISO/IEC 17025, measurement uncertainty, proficiency testing and calibration.

The IECEE reported to the CAB in Stockholm that peer assessment as used by the IEC was in conflict with the ILAC document on implementation of ISO 17025 and that the document was considered to be long and complex.

4. CAB7287/R: Report on collaboration from September 2000 to May 2001, Geneva 2001 CAB meeting

Actions taken

Liaison meeting held in Washington during ILAC GA at which further proposals for collaboration were developed. These were reviewed and commented by IECEE CAG.

Discussion at the Geneva 2001 CAB meeting, minuted below, resulted in CAB Decision 17/2001.

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The chairman asked the CAB to consider supporting the IECEE response to ILAC proposals for further collaboration.

Mr Kitzantides said that initially the ILAC proposals had seemed acceptable and the CAG had commented in this light. However, the further detail on basic principles now proposed by ILAC regarding IECEE laboratories meeting the measurement traceability requirements of ISO/IEC 17025 required deeper consideration. In his view it was not certain that ISO/IEC 17025 compliance by IECEE laboratories was a requirement.

The chairman said he understood ILAC felt it could help IECEE fulfil the requirements for accrediting calibration laboratories, which did appear to be a requirement of ISO/IEC 17025. A consistent interpretation of ISO/IEC 17025 was clearly needed to ensure mutual understanding of the co-operation issues to be considered.

Mr Cleare considered that a fundamental review of the objectives of the CAB/ILAC collaboration needed to be undertaken to identify issues where co-operation would maximize use of resources and could be achieved whilst maintaining the principles upon which IEC schemes were based. He proposed that the CAB review all documentation and collaboration already achieved in Firenze.

Annexes:

A: Task Force report on 'Developing a common approach'
B: Proposal for further collaboration with comments from IECEE CAG
C: Paper from Mr Mader US, on Transportable Conformity Assessment[sm]

ANNEX A: Task Force report on 'Developing a common approach', extract CAB/251/R

IEC/CAB ILAC COOPERATION

DEVELOPING A COMMON APPROACH

18 August 2000

Following the CAB/ILAC Workshop "Exploring Calibration" held in Geneva on 20 May 1999, a small Task Force was established to investigate possibilities for cooperation between ILAC and IEC/CAB at a technical level. In particular, the following issues were identified as issues for possible complementary activities, which might reduce duplication or divergence of approach when dealing with laboratories by both parties.

- Implementation of ISO/IEC 17025
- Measurement uncertainty (IECEE-CTL document to be considered)
- Proficiency testing
- Calibration

The Task Force currently consists of Mr Anthony Russell, Chief Executive, of National Association of Testing Authorities, Australia (NATA - representing ILAC), Mr Pierre de Ruvo of the IEC Central Office (representing the IECEE Scheme) and Mr Chris Agius of Quality Assurance Services (QAS - representing the IECEx scheme). Mr Richard Kay, Secretary IECQ has also provided input on behalf of the IECQ scheme.

A meeting was held between Chris Agius and Tony Russell on Monday 10 April 2000 to collate existing information available from both ILAC and IEC, relevant to the topics listed above. The following sections of this paper report on the current situation as known at August 2000, and additional information is now sought to update ILAC's Accreditation Policy Committee and the IEC/CAB.

1. Implementation of ISO/IEC 17025 - The Current Situation

ISO/IEC 17025 was published in December 1999 and its adoption and implementation by both ILAC and IEC/CAB member bodies will affect laboratories coming under both the ILAC and the IEC/CAB schemes.

The following is the known position to date of the respective ILAC and IEC/CAB schemes:

1.1 ILAC

The 1999 General Assembly of ILAC made the following decisions regarding adoption and implementation of ISO/IEC 17025 at its meeting held in Rio de Janeiro on 19-20 October 1999:

The General Assembly endorses the recommendations of the Technical Accreditation Issues Committee (TAIC) that:

3.7.8 ILAC accept, two years from the date of its availability, to implement ISO/IEC 17025 and check for compliance in the laboratories through the normal surveillance schemes.

In addition, the TAIC currently has a work item for preparation of a guidance document to assist accreditation bodies to have a common approach in the transition period over the next two years. In preparing that document the TAIC concluded that, due to translation and other needs, it would be more appropriate to set a deadline for all accredited laboratories to comply with ISO/IEC 17025 by 31 December 2002.

The TAIC document, entitled "Guidance for accreditation to ISO/IEC 17025" is currently under review for technical comment by ILAC members and members of the ILAC Laboratory Liaison Committee. It is expected to be distributed for voting in August 2000 for final approval at the ILAC General Assembly in Washington in November 2000.

The ILAC Laboratory Liaison Committee (LLC) which is a stakeholder group of laboratory representatives in the ILAC system, has also drafted a document entitled *"Guidance for accreditation to ISO/IEC 17025 and what evidence to look for."* Comment on this document is expected to be submitted to the LLC by 11 August 2000.

1.2 IECEE

Currently the IECEE scheme is working to ISO/IEC Guide 25 plus Operational Documents; the list of Current Decisions from the Committee on Testing Laboratories (CTL); and specifically to IEC Standards which constitute the essence of the technical competence and capability of laboratories operating within the CB Scheme.

IECEE has reviewed the differences between ISO/IEC Guide 25 and ISO/IEC 17025 and concluded that the substance has not changed but more details are given in ISO/IEC 17025 to clarify the relevant requirements. For its 1999 reassessment program, IECEE has been using ISO/IEC Guide 25 with ISO/IEC 17025 used as a reference guide to clarify any doubt.

The adoption of ISO/IEC 17025 is to be further considered by the IECEE's EVA-G (Evaluation Group) and CMC (Certification

Management Committee) to determine when ISO/IEC 17025 should be implemented.

1.3 IECEx

Currently the IECEx scheme is working to ISO/IEC Guide 25 plus three specific Technical Guidance Documents for the IEC 60079 series (namely Ex'd', IEC 60079-0 and 60079-1; Ex'e', IEC 60079-7; Ex'i', IEC 60079-11).

There is not yet an IECEx stated policy on adoption and implementation of ISO/IEC 17025. This policy is to be considered at the next IECEx Management Committee meeting (4-8 September 2000).

1.4 IECQ

The current IECQ criteria for approval of an independent testing laboratory are detailed in clause 2.4 of IECQ QC001002-3, Third Edition (1998), *"Rules of Procedure of the IEC Quality Assessment System for Electronic Components (IECQ), Part 3: Approval Procedures".*

The criteria for approval include:

- compliance with ISO/IEC Guide 25 or equivalent regional or national standards;
- additional interpretive requirements of ISO/IEC Guide 25 as defined in clause 2.4.2, *Technical Competence*, of the *Approvals Procedures*; and
- special requirements for subcontracting of calibration or testing by an approved laboratory.

For use of subcontracted laboratories clause 2.4.2 states that *"... Where possible the nominated testing laboratory shall be approved to ISO/IEC Guide 25 by a nationally recognised accreditation body."*

Clause 2.4.3 deals with appraisal of independent testing laboratories and states that *"… In performing the appraisal, account shall be taken of any comparable approvals granted by a recognised international, regional or national accreditation (certification) body".*

The IECQ's policy on future implementation of ISO/IEC 17025 was considered at the IECQ-ICC meeting on 22 May 2000 which endorsed the proposition that, in the first instance, it should be implemented by IECQ accredited Supervising Inspectorates by 2001-12. The decision on adoption and referencing in the relevant IECQ governing documents is likely to be taken in 2001.

IECQ publishes a *"List of Approved Testing Laboratories"* as QC 001005, *"IECQ Register of Approvals, Part 1, Section 3."* It is available on the IECQ website, www.iecq.org and currently lists approved laboratories in France, Germany, India, Japan, the Russian Federation, Singapore, United Kingdom and USA.

Commentary

a) In terms of consistency between ILAC and IEC/CAB, it would be desirable if IEC/CAB considered adoption of a common policy on implementation time-frames for ISO/IEC 17025.

b) It would be desirable if ILAC member bodies had available copies of the IECEx Technical Guidance Documents for those laboratories that are covered by both the IECEx scheme and ILAC members' accreditations for the same scope. This could ensure that the ILAC assessments cover the specific needs of the IECEx scheme.

c) The IEC schemes would benefit from supply of the ILAC accreditation bodies' assessment reports on IEC/CAB scheme-related scopes. These would need to be provided directly by the accredited bodies, due to the confidentiality responsibilities of the ILAC member bodies to their accredited facilities.

d) The IECEx scheme would want on-site assessments by ILAC accreditation bodies to include evaluation of the laboratory's ability do deal with the interpretation elements of relevant standards for compliance purposes, including use of the IECEx Technical Guidance Documents.

2. Measurement Uncertainty

Below is summarised the currently known situations within ILAC and the IEC/CAB schemes, relevant to measurement uncertainty issues.

2.1 ILAC

The current ILAC position on measurement uncertainty is summarised in Decisions of the ILAC 1999 General Assembly.

The ILAC decisions essentially relate to two groups of laboratories. The first group is testing laboratories and the expectation for them is that they will comply with the measurement uncertainty requirements in Clause 5.4.6.2 of ISO/IEC 17025 within the two year transition period for adoption of this new Standard.

The second group of laboratories is those involved in calibration and measurement (and includes those testing laboratories that perform their own calibrations). For this group the ILAC 1999 General Assembly Decision number 3.7.6 applies to ILAC members that will be part of the imminent ILAC Multilateral Mutual Recognition Arrangement (expected to come into effect later in 2000). Decision 3.7.6 states:

ILAC Arrangement Signatories shall have and implement criteria for the determination of uncertainty of measurements in calibration by June 2000.

The signatories shall demonstrate that such documents are equivalent to the GUM Guide (ISO Guide to Uncertainty of Measurement). The document EAL-R2 (now EA-4/02) "Expression of the Uncertainty of Measurements in Calibration" will be used as the measuring stick for such documents as a temporary measure pending the development of an ILAC document.

Many ILAC accreditation bodies have developed their own guidance documents for application of the GUM, and most have a series of worked examples to assist laboratories to estimate their own uncertainties.

2.2 IECEE

The IECEE CTL in 1994 published its "Guidance Document on Measurement Uncertainty". That Guide is a condensation of some of the ISO GUM and is consistent with it. The IECEE's Committee on Testing Laboratories (CTL) is currently reviewing its measurement uncertainty requirements and expects to propose a revised document by the end of 2000.

It is understood that CTL might also use another document which lists "accuracy" requirements for the various instruments used in various tests covered by the CB scheme.

The CTL Guidance document also includes a Clause 5 dealing with 'pass/fail' decisions on measurements whose uncertainties straddle a specification limit. This clause sets a general rule for such decisions when not covered specifically in a standard. In ILAC's case, it has published a separate document on this topic, ILAC-G8:1996 "Guidelines on Assessment and Reporting Compliance with Specification". That ILAC Guide gives a range of difference decision mechanisms that could be specified for compliance. It is currently under review within the ILAC Technical Accreditation Issues Accreditation Committee (TAIC).

2.3 IECEx

IECEx established a working group to deal with measurement uncertainty and it is due to report to the Ex Testing and Assessment Group (Ex TAG) by September 2000. It is considering the IECEE CTL document in that process.

2.4 IECQ

IECQ's requirements for measurement uncertainty are referred to in clause 2.4.2 and Annex C (normative) to clause 2 of QC 001002-3. It includes guidance from ISO 10012-1 and the Annex deals with IECQ policy on uncertainty of measurement and inset limits.

Commentary

a) Both the IECEE and ILAC policies and procedures are consistent with the ISO GUM Guide, and both bodies have found it necessary to provide simplified guidance to their laboratories.

b) IECEE (CTL), ILAC (TAIC) and IECEx (EXMC) have processes available to develop technical advice on measurement uncertainty for affected laboratories. It would be useful to distribute such advice between these respective groups on issues such as measurement uncertainty.

c) There may be laboratory reporting requirements in the IEC/CAB schemes which may be different to some of the requirements of ISO/IEC 17025. It would be useful for the IEC schemes to compare their existing requirements for reporting with those specified in ISO/IEC 17025, Clauses 5.10.2 and 5.10.3. (Measurement uncertainty is one such issue).

d) It would be desirable for ILAC member bodies to be aware of the specific reporting requirements and formats of the IEC/CAB schemes so that these could be taken into account in their on-site assessments of laboratories. This is consistent with the extra reporting requirements specified from special client groups as detailed in Clause 5.10.3.1(e) of ISO/IEC 17025.

e) It would be desirable for ILAC member bodies to be aware of the requirements for compliance decisions, specified in Clause 5 of the IECEE/CTL (Sec) 956/94 guidance document.

3. Proficiency Testing

3.1 ILAC

The ILAC Mutual Recognition Arrangement has established policies on proficiency testing and its use in the accreditation process. ILAC has

also published ILAC-G13:2000 "Guidelines for the Requirements for the Competence of Providers of Proficiency Testing Schemes".

Many ILAC members undertake their own proficiency testing programs, including measurement audits of calibration laboratories. Others outsource most of the proficiency testing to specialist bodies. Some use a combination of their own and external schemes.

To date, due to the nature of the testing and the limited numbers of electrical safety testing laboratories in individual economies, there has been very few proficiency testing activities undertaken in the areas of relevance to laboratories covered by the IEC/CAB schemes. Some international programs have been conducted, however.

3.2 IECEE

The CTL has been running “proficiency testing” for the past ten years but these were called “Round Robin Tests”. Formal “proficiency testing” was initiated in 1999 and in the 1999-2000 periods covered temperature rise in switches, ball pressure test and electric strength test. Additional programs were being considered at the CTL meeting held in May 2000.

Individual laboratories participating in the CB Scheme are required also to participate in national proficiency testing programs.

3.3 IECEx

The IECEx scheme has only been operational since 1999 and to date no proficiency testing has been undertaken. This issue is to be considered by the IECEx TAG (Testing and Assessment Group).

3.4 IECQ

IECQ’s Approval Procedures (QC 001002-3) do not currently refer to participation in proficiency testing by approved laboratories.

Commentary

a) Due to the resources involved and limited opportunities for operation of proficiency testing schemes in this area, it would be desirable to have cooperative involvement between IEC/CAB and ILAC on proficiency testing.

b) The outcomes from such PT's could be usefully shared, also, with the agreement of the affected laboratories, to resolve issues such as poor performance by individual laboratories and effectiveness of their corrective actions and difficulties in interpretations of specific standards, which are often identified as a result of a proficiency testing program.

c) It could be useful to establish a formal liaison between IECEE (and other CAB schemes), and ILAC on the topic of proficiency testing to explore in more depth opportunities to collaborate in this area.

4. Calibration

The current situation regarding calibration issues, as known to date, is as follows:

4.1 ILAC

ILAC has published two documents on calibration and the related topic of traceability of measurements. These documents are ILAC-G5:1994, "Calibration and Maintenance of Test and Measuring Equipment" and ILAC-G2:1994, Traceability of Measurements". Both documents are currently under revision within the ILAC Technical Accreditation Issues Committee, and it is likely that ILAC will adopt as its policy on traceability of measurement, a joint policy that has previously been developed by two regional Multilateral Mutual Recognition Arrangements (EA and APLAC).

Individual accreditation bodies within ILAC have established specified calibration procedures and recalibration intervals. Others have adopted a case-by-case approach to calibration periods and procedures applicable to individual laboratories.

4.2 IECEE

The IECEE has advised that existing reference standards on the topics of calibration and measurement traceability are sufficient and no further documents need development.

4.3 IECEx

The IECEx scheme has not to date specified any policy on the topic of calibration and traceability. This issue is to be addressed by IECEx Testing and Assessment Group (TAG).

4.4 IECQ

IECQ's policy on measurement traceability and calibration requires mandatory compliance with ISO 10012; Part 1. This policy is defined in clause 2.4.2 of IECQ's Approval Procedures (QC 001002-3).

Commentary

a) It would be desirable to publish the availability of networks of ILAC members' accredited calibration laboratories, to support the testing activities of laboratories involved in the IEC/CAB schemes. As it is a fundamental requirement for such accredited calibration laboratories to demonstrate traceability to national and international standards of measurement, this should add confidence to the calibration status and traceability of testing equipment used in the IEC/CAB scheme's laboratories.

b) It would be desirable also for ILAC and the IEC/CAB schemes to have a common policy on acceptable sources of measurement traceability. The EA/APLAC policy could be considered by CAB to achieve such a common approach.

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ANNEX B: Extract document CAB/287/R

IEC/ILAC PROPOSALS FOR FURTHER COLLABORATION

1. The CAB will consider a proposal that the schemes issue a joint statement announcing that the transition from ISO Guide 25 to ISO/IEC 12025 within laboratories falling under the schemes will be aligned with the implementation programme of ILAC.

2. The CAB will ask the schemes to consider recognising reassessment reports issued under the ILAC Arrangement as sufficient evidence of successful transition from ISO Guide 25 to ISO/IEC 17025, and therefore not require an additional reassessment of the aspect.

3. The IECEE-CB Scheme will conduct a pilot exercise in which a detailed assessment report issued under the ILAC Arrangement will be examined by the IEC assessment team (having first sought the client's consent) in place of conducting a detailed assessment of the elements covered. If successful, this process will be extended stepwise, and procedures developed later, on the basis of experience.

4. The IECEE-CB Scheme will provide assess to the CTL interpretations to those members of the ILAC Arrangement involved in the above pilot exercise.

5. The IECEE-CB Scheme will provide ILAC (Tony Russell) with a copy of its 2001 proficiency testing programme with a view to integrating these (international) activities with ILAC's (regional) activities to the benefit of both bodies.

6. IEC-CAB and ILAC will exchange lists of working groups (including working groups of the schemes) and identify areas of common interest where cross-representation can be considered.

7. ILAC (Tony Russell) will prepare a list of principles on the use of accredited calibration laboratories, as required by ISO/IEC 17025, in order to assist laboratories operating under the schemes in meeting the requirements of ISO/IEC 17025.

8. The IECEE-CAB (Don Mader) will develop a paper on the concept of "Transportable Conformity Assessment" for ILAC. This paper can be used as a basis for further collaboration with ILAC.

ANNEXURE – Containing comments from IECEE CAG

IEC/ILAC PROPOSALS FOR FURTHER COLLABORATION

1. The CAB will consider a proposal that the schemes issue a joint statement announcing that the transition from ISO Guide 25 to ISO/IEC 12025 within laboratories falling under the schemes will be aligned with the implementation programme of ILAC. Agreed by CAG. IECEE will impose transition requirements no more onerous than ILAC, and will accept earlier transitions.

2. The CAB will ask the schemes to consider recognising reassessment reports issued under the ILAC Arrangement as sufficient evidence of successful transition from ISO Guide 25 to ISO/IEC 17025, and therefore not require an additional reassessment of the aspect. Agreed by CAG

3. . The CAG would prefer greater reciprocity here. The CAG is prepared to work towards the acceptance of ILAC's work on the systems aspects of audits, if ILAC is prepared to work towards accepting IECEE's work on the technical aspects of assessments. It is therefore proposed to split this section into two parts as follows:

   3 (a) The IECEE-CB Scheme will conduct a pilot exercise in which a detailed assessment report issued under the ILAC Arrangement will be examined by the IEC assessment team (having first sought the client's consent) in place of conducting a detailed assessment of the system elements covered. If successful, this process will be extended stepwise, and procedures developed later, on the basis of experience

3 (b) ILAC will conduct a pilot exercise in which an assessment report issued under the IECEE-CB Scheme will be examined by an assessment team operating under the ILAC Arrangement (having first sought the client's consent) in place of conducting a detailed assessment of the technical elements covered. If successful this process will be extended stepwise, and procedures developed later, on the basis of experience.

4. The IECEE-CB Scheme will provide assess to the CTL interpretations to those members of the ILAC Arrangement involved in the above pilot exercise. Agreed by CAG

5. The IECEE-CB Scheme will provide ILAC (Tony Russell) with a copy of its 2001 proficiency testing programme with a view to integrating these (international) activities with ILAC's (regional) activities to the benefit of both bodies. Agreed by CAG. This information is on the IECEE's web site. The sharing of results, however, is a more sensitive issue, and the CAG sees the need to engage in more detailed discussions, possibly on a case-by-case basis.

6. IEC-CAB and ILAC will exchange lists of working groups (including working groups of the schemes) and identify areas of common interest where cross-representation can be considered. Agreed by CAG

7. ILAC (Tony Russell) will prepare a list of principles on the use of accredited calibration laboratories, as required by ISO/IEC 17025, in order to assist laboratories operating under the schemes in meeting the requirements of ISO/IEC 17025. Welcomed by CAG

8. The IECEE-CAB (Don Mader) will develop a paper on the concept of "Transportable Conformity Assessment" for ILAC. This paper can be used as a basis for further collaboration with ILAC. Paper is under development.
9. Additional item suggested by CAG:

   There is a need to achieve closer cooperation with regard to the document on measurement uncertainty being developed in the LLC. Representatives from IECEE-CTL

should try to attend the next LLC meeting scheduled to be held in Brussels on 26 March, and to develop the subject further during the meeting of the CTL scheduled for the first week in June.

Annex C: Paper from Mr Mader US, on Transportable Conformity Assessment[sm]

The Concept of Transportable Conformity Assessment[sm] as a Basis for Collaboration Between CAB and ILAC

(Reference: CAB/287/R, 2001-06-08)

The GOAL for the IEC Schemes is to achieve Transportable Conformity Assessment[sm], such that:

- The conformity assessment (e.g., testing, inspection, assessment, certification, audit, pre-market surveillance, post-market surveillance) carried out at the point of production in the departure economy is accepted in the destination economy without further evaluation, and
- The value of the conformity assessment is measured by the amount of actual market acceptance delivered.

Transportable Conformity Assessment[sm] is a strategy for reducing trade barriers related to demands (both regulatory and market driven) for conformity assessment. The strategy promotes use of as many multiple and parallel conformity assessment processes as possible, so market conditions can determine the extent to which each process contributes to facilitating trade and maintaining both regulatory authority and market confidence. There are essentially four processes that reduce conformity assessment related trade barriers identified in the strategy. These are:

1. Suppliers Declaration of Conformity (SDoC),
2. National Treatment for Third-Party Conformity Assessment Bodies,
3. Government-to-Government Arrangements [i.e. Mutual Recognition Agreements (MRAs)], and
4. Cooperative Arrangements (Bi-lateral and Multi-lateral) Between Conformity Assessment Bodies.

The Transportable Conformity Assessment[sm] strategy has been extensively implemented in the area of conformity assessments related to the safety of electrical and electronic products. A description of the IECEE CB-Scheme's predominant role in this implementation illustrates a real and practical application of Transportable Conformity Assessment[sm] principles, and the manner in which the IECEE CB-Scheme supports them.

The IECEE-CB Scheme is essentially a multilateral arrangement between National Certification Bodies. Within the scheme, participants assess each other's competence (peer assessment) to carry out product evaluation and testing related to IEC Standards (including declared National Differences) and, thereafter, accept data from each other under specified conditions, through the vehicles of the CB Test Certificate (CBTC) and the CB Test Report (CBTR). The IECEE CB-Scheme in practice is a "Cooperative Agreement Between Conformity Assessment Bodies." Based on the extent of its use in international trade, the IECEE CB-Scheme directly supports a Transportable Conformity Assessment[sm] strategy in the electrical and electronic products sector. In fact, the IECEE-CB Scheme may be the dominant "Cooperative Agreement Between Conformity Assessment Bodies" in this sector, and is likely the most recognized and broadly used element of the strategy.

Numerous other bilateral and multilateral agreements exist outside the scope of the IECEE CB-Scheme that also serve as "Cooperative Agreements Between Conformity Assessment Bodies" in the electrical and electronic products sector. The CB Scheme, along with these other agreements, are working in parallel using the same Transportable Conformity Assessment[sm] mechanism

(Cooperative Agreements Between Conformity Assessment Bodies) to facilitate trade and maintain confidence. When multiple applications of the same mechanism exist in a given sector, consideration of cooperation among them should immediately come to mind as a means of eliminating unnecessary redundancies, and promoting market-acceptance efficiency.

The International Laboratory Accreditation Cooperation Multilateral Recognition Agreement (ILAC MLA) and the IECEE CB Scheme are "Cooperative Agreements" under Transportable Conformity Assessment[sm]. Both the ILAC MLA and the IECEE CB-Scheme seek the acceptance of laboratory test data on as broad a scale as possible. The ILAC MLA, however, involves cooperation between laboratory accreditation bodies while the IECEE CB Scheme involves cooperation between National Certification Bodies and their associated testing laboratories. Despite the involvement of different bodies, the likelihood of commonalities between the processes used to assure the competence of laboratories under these agreements seems to warrant a strong effort to identify areas where each can support the other.
A detailed review of the procedures used in each area is needed to assess whether they cover the same laboratory testing processes, and to not only discover but also take advantage of the commonalities they share. The following potential opportunities for cooperation can be envisioned:

- In both areas, laboratories are initially assessed for compliance with international requirements (ISO/IEC Guide 25 or ISO/IEC 17025). The assessments performed under one agreement may be acceptable to the other agreement or usable by the other agreement to reduce duplicate activities.

- Each area has its own particular approach to initial assessments according to international requirements. A combined or collaborative approach that utilizes the strengths of each may provide for an even higher assurance of competence of testing laboratories, and eliminate the need for separate assessments.

- Opportunities also exist for activities related to ongoing assurance of competence of laboratories. Such activities in one area may be acceptable or usable in the other area. Also, a combined or collaborative approach may provide better assurance and eliminate redundant activities.

- One specific aspect of ongoing assurance of competence might be considered immediately. In the IECEE CB Scheme, participating bodies review the data they exchange; and, in addition, participate in proficiency testing programs and peer reassessments. Laboratory accreditation under the ILAC MLA may also involve proficiency testing and reassessments. These activities appear to accomplish the same objective, and their interchangeability could be considered.

In addition to Cooperative Agreements Between Conformity Assessment Bodies (the IECEE CB Scheme and others), activities are ongoing in the other three Transportable Conformity Assessment[sm] processes in the electrical and electronics product sector. These are:

- Suppliers Declaration of Conformity (SDoC) – An SDoC is accepted for market and regulatory compliance in a variety of economies/countries/regions around the world. The IECEE CB-Scheme's CB Test Certificates and CB Test Reports are being used by manufacturers to support SD0C.
- National Treatment for Conformity Assessment Bodies – The Treaty of Rome (which established the European Community) and the North American Free Trade Agreement both provide national treatment for conformity assessment bodies performing services related to electrical and electronic product safety.
- Government-to-Government Mutual Recognition Agreements (MRAs) – The European Commission has concluded a number of MRAs with "third countries," including the U.S. and Canada, which address conformity assessment related to electrical and electronic products. An MRA in this sector is also under discussion within the Asia Pacific

Economic Cooperation (APEC). The APEC MRA makes specific reference to the IECEE CB-Scheme.

Perhaps the most significant contribution of the IECEE CB-Scheme is validation of the Transportable Conformity Assessment[sm] strategy by practical example. Even though the IECEE CB-Scheme is highly successful and has made a major contribution to reducing trade barriers, the use of all Transportable Conformity Assessment[sm] processes (including other Cooperative Agreements in parallel) has been implemented in this sector. When a sector has a powerful tool like the IECEE CB-Scheme to reduce trade barriers and maintain confidence, and yet implements all the Transportable Conformity Assessment[sm] processes, the theory that all available Transportable Conformity Assessment[sm] processes should be used in parallel is proven in practice.

The flow chart in Annex 1 titled "Flow of a CB Test Report (CBTR)/CB Test Certificate (CBTC) for a Product Through Transportable Conformity Assessment[sm] illustrates how the theory is proven in practice.

For the IEC Schemes and their participants, the strategy is to collectively position themselves to implement the concepts of Transportable Conformity Assessment[sm] by delivering value-added market-relevant conformity assessment services to fully implement all of the Transportable Conformity Assessment[sm] models.

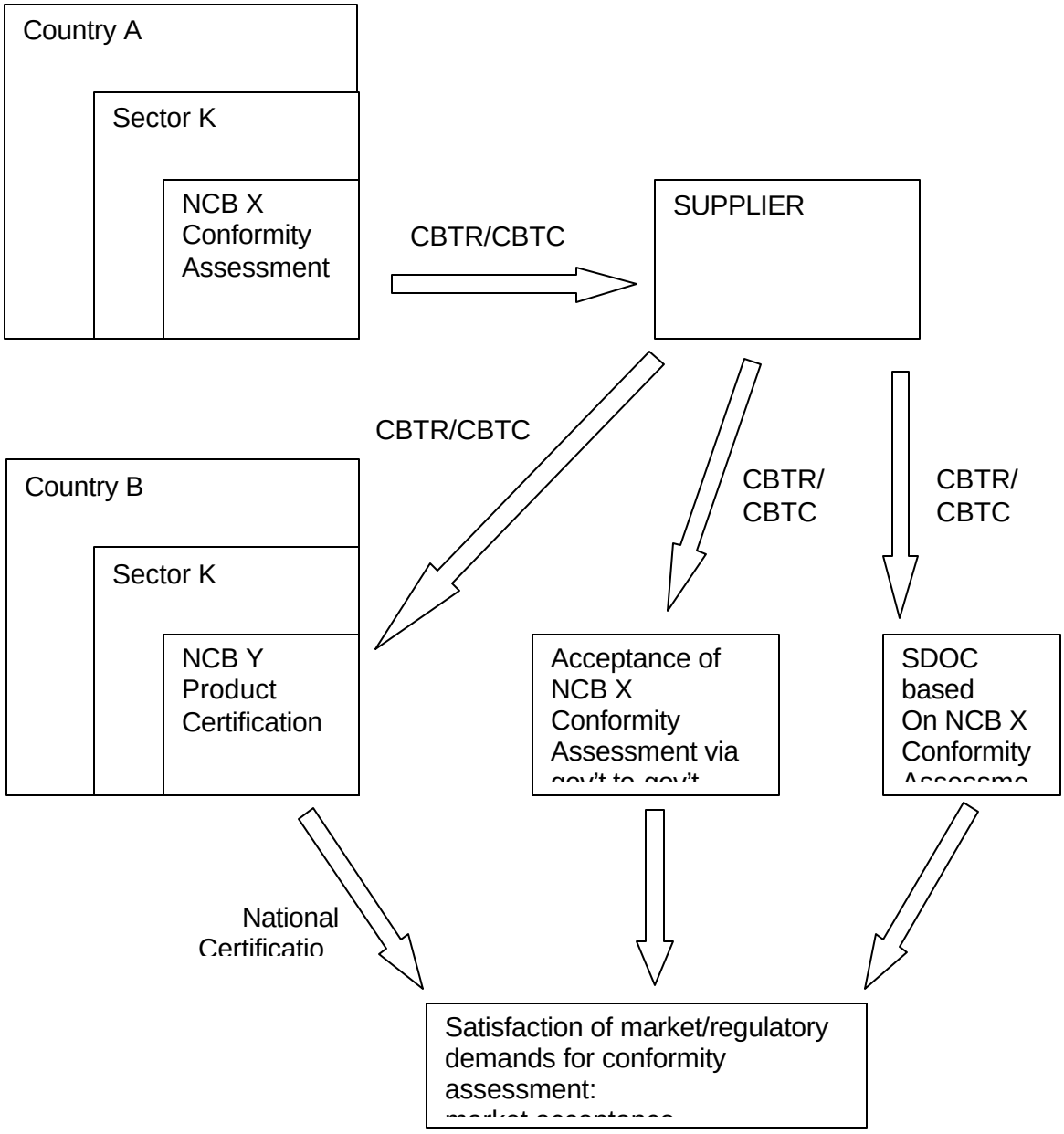
By continuing to pursue this strategy , the IEC Schemes will be able to:

- Provide a high level of confidence to acceptance interests that requirements for the protection of public health, safety and protection of the environment are maintained.
- Provide market relevance of their conformity assessment services.
- Provide a global business-to-business interface.
- Provide conformity assessment solutions for regulatory and market acceptance.
- Provide convergent (congruent) conformity assessment processes to significantly reduce redundancies (at the national and regional levels).
- Provide a sector-based approach to conformity assessment.
- Provide free choice for suppliers to use a competent conformity assessment body regardless of its location.
- Provide increased reliance on rigorous testing laboratory and certification body quality management systems.
- Provide for use of competent manufacturers' laboratories.
- Provide more market and regulatory information to acceptance interests.
- Provide support for harmonization of standards, regulatory requirements and conformity assessment processes on a sector-by-sector basis.

For a diagrammatic representation of the relationships between bodies involved in the IECEE CB-Scheme, as related to value, confidence and evidence, refer to the flow chart in Annex 2 titled "Conformity Assessment Dimensions." This flow chart illustrates how potential opportunities for collaboration between CAB and ILAC in the area of "Accreditation and Peer Assessment Schemes" can benefit both the IEC Scheme participants and the ILAC MRA signatories by taking advantage of the commonalities they share.

ANNEX 1

Flow of a CB Test Report (CBTR)/CB Test Certificate (CBTC)
For a Product Through Transportable Conformity Assessment[sm]



ANNEX 2

CONFORMITY ASSESSMENT DIMENSIONS

Relationships Between Bodies Involved in the IECEE CB-Scheme