

Measurement Advisory Committee Teleconference Summary

**Friday, February 27, 2009
(01:00 PM – 4:00 PM)**

Meeting Minutes

1. Introductions – MAC Chair and Recording Secretary

P. Wright introduced herself and explained that purpose of the meeting, took roll of the members participating in the teleconference and introduced the A2LA Calibration Staff.

2. Review and approval of agenda

- a. **MOTION 1 – P. Wright** – motion to review and approve agenda – *passed*.

3. Agenda Items

- a. The question was raised if it is acceptable to allow a lab to “opt out” of inclusion of the Unit Under Test (UUT) when reporting uncertainties on the client calibration cert.

This item was brought to the MAC by an A2LA accredited laboratory that did not feel that it was necessary to include the uncertainty of the UUT when reporting the uncertainty on the calibration certificate. The MAC members were asked to determine the acceptability of not including information on the device under test when reporting the uncertainty of the calibration on an accredited calibration certificate.

Discussion:

Clarification was requested regarding the definition of the UUT for the purposes of this discussion. It was clarified for the purposes of this item and the teleconference that UUT contribution referred to the contributor due to the device under test that is typically included as part of the uncertainty reported to the client on the client calibration certificate.

Reiteration was made that the uncertainties calculated in order to support a laboratory’s Scope of Accreditation was not the focus of this discussion.

Discussion ensued as to whether laboratories should report an uncertainty that includes a typical UUT, or for each device calibrated, for example, by every serial number.

The consensus was that the uncertainty of the device under test needs to be reported to the customer whether by product type or product. Not necessarily each item or product that is calibrated, for example by serial number of each item.

For clarification it was noted that in cases where laboratories are making statements of compliance utilizing “Zero-Guardbanding” they can only do so via prior permission of the client and a record of the uncertainty calculated at the time of the calibration must still be kept per 17025 and ILAC G-8.

A question was raised as to what is the definition of a “typical uncertainty”. Laboratories routinely report “typical uncertainties” rather than the actual uncertainty and it was suggested that this should be defined. It was requested that an action item be taken up to address this issue.

Consensus – The MAC does not support the laboratory’s request to exclude the contributor to the unit [device] under test when reporting the uncertainty results to their customers.

Action Item 1: V. Pugh to place on the September MAC Teleconference Agenda to seek volunteers willing to work on a task group to provide a definition of “typical” uncertainties.

- b. The question was raised as to how many parameters need to be witnessed as and reported as OIPE or SIPE on the Method Review Matrix (MRM) during an on-site assessment and whether there should be a minimum percentage established.

This was brought up by an Accreditation Council [AC] member who noted that up to seventy percent of the parameters for calibration laboratories were never observed from AC packages reviewed and a question was brought to the group as to whether an imposed minimum number of observed parameters should be implemented to strengthen the calibration program.

The general discussion determined that if not all parameters are witnessed during the assessment the assessor(s) do not get a true feel for the uncertainties that the laboratories are claiming as you cannot make the determination of all necessary contributors until you have visually verify their methods and evaluated technical competency. It was felt that the assessor should inform the laboratory in advance of the assessment that they are expected to have equipment readily available during the assessment to calibrate to ensure that the assessor will be able to observe parameters and determine the level of the laboratory’s technical competency.

It was noted that the policy should be flexible to allow for exceptions for unique equipment that may not be readily available or very complex calibrations than cannot necessarily be observed during assessments. Discussion included the development of a policy similar to the PT policy to ensure that all parameters on scope are observed in a 4 year period. It was suggested that the next assessor would need to observe what the previous assessor did not and a deficiency cited would warrant removal of the parameter from the laboratory’s scope unless the laboratory was successful in obtaining an exception from A2LA. It was also noted that the expectation should be for the laboratory to have the assessor witness all parameters on their scope of accreditation during the on-site assessment with exceptions only granted for unique instances.

Questions arose as to whether this applied for new laboratories, in-house calibrations, and scope expansion assessments. Some concern was expressed that this would add to the length of the assessment, however, it was also noted that since, theoretically, only half the parameters needed to be observed during any one assessment this could actually decrease the length of the assessment. It was determined that this would apply only for renewal assessments as it was generally understood that parameters for new laboratories, in-house calibrations and scope expansions already require all parameters to be observed.

It was suggested that we should add additional requirements to R205 to address this issue with consultation with A2LA management to ensure transparency of the requirement to both assessors and laboratories. It was discussed that Laboratories that are new applicants or expanding their scope of accreditation should already be expected to show proficiency in all parameters prior to any parameter being added to their scope. The policy should also make it clear that it affects the calibrations on the scope of accreditation as well as the laboratory's in-house calibrations.

Action Item 2 – P. Wright with consultation of A2LA Management to develop language for an added requirement to the R205 that all parameters from a laboratory's scope of accreditation as well as all in-house calibrations performed to support the scope of accreditation must be observed during assessments within a four-year timeframe. Deficiencies cited will warrant the affected parameters to be removed from the scope of accreditation unless an exception request is submitted by the laboratory and approved by A2LA. [Equipment out for repair or calibration is not considered an appropriate reason to grant an exception.]

Post note – PSW 3/9/09: Upon consultation with A2LA Management it was determined that a caveat should also be included in the exception request that whenever a laboratory can demonstrate successful participation in commercially available proficiency testing or a well organized interlaboratory program that meets the requirements of Guide 43 at the level of the uncertainty being claimed on the scope of accreditation the laboratory can rely on this demonstration in lieu of an observed parameter during the assessment. The assessor must still determine IPE, however, during the assessment.

Due Date: April 4, 2009 at 2009 Conclave.

- c. Does each branch facility need their own electrical budgets or can a branch be supported by corporate budgets will all things being consistent other than staff?

A laboratory had requested permission to develop uncertainty budgets at the corporate level and disseminate them for use across the branch systems. It was felt that all things remaining consistent other than the staff, a multiple branch system could use corporate budgets. Discussion included that repeatability among the branches is a significant portion of the budget and will likely be different from lab to lab in a branch system. In addition a corporate budget does not take into account the level of expertise of the local staff in being able to actually achieve the corporate numbers at the local level. A concern was expressed that if repeatability is determined at the corporate level a corporate budget would not truly represent each branch's capabilities and therefore would not be an appropriate budget. No consensus could be determined on whether the values that are entered into an uncertainty template must be specific for each branch system.

Consensus – A laboratory could use a standard template for their electrical budgets that defines which contributors are significant.

- d. GIDEP and Z540-1, when standard methods found on GIDEP are not meeting requirements of Z540-1 what is expected of the laboratory?

This concern was brought up by an assessor who noted that when a laboratory is claiming a procedure found on GIDEP meets paragraph 10.2A from Z540-1 found in C207 but then it is discovered that it doesn't contain all the proper equipment, ranges etc. what is a laboratory to do? If they write a procedure based on the standard method/procedure does it have to be validated? Calibration staff agreed that in that case the procedure would need to be validated. It was discussed that just because a procedure comes from GIDEP it does not make it an acceptable procedure and it was noted that if a laboratory elects to retain the procedure but then write a supplemental document to the procedure that contains the information needed to meet Z540-1 that would be acceptable. A question was then brought up as to whether this supplemental document would need to be validated. It was discussed that it would only need to be validated if the supplemental information changed the methodology or the process. If there is no material change in the method no validation would be needed. A question also arose as to whether the manufacturer equipment manuals need to be validated. A suggestion was made to take up the validation issue as an action item in order to move on with the agenda. The Consensus of the group was that if a laboratory is using a procedure found on GIDEP and the procedure does not meet the requirement of Z540-1 paragraph 10.2A an assessor is to cite a deficiency and furthermore a laboratory can develop their own procedure based on the one found in GIDEP or they can develop a supplemental document as an addendum to the procedure.

Action Item 3: P. Wright to work with A2LA Management to provide guidance information back to the MAC on when validation is and is not required.

Due Date: August 31, 2008

- e. Sampling as it applies to calibration and/or if it applies to calibration. Should ISO/IEC Section 5.7.3 be applicable to calibration?

A2LA's current position is that Section 5.7.3 does not apply to calibration laboratories. It was felt by some MAC members that the section does apply in regards to the amount and types of measurements that should be taken for Type A uncertainties and in regards to some calibrations. It was however, clarified that it was not the intent of the standard that this section apply to calibration laboratories.

Consensus – The MAC supports A2LA's current position that ISO/IEC Section 5.7.3 does not apply to calibration laboratories.

- f. Changing the Bylaws to allow the Vice-Chairman serve the 2 year position and then have the Vice Chairman automatically appointed to the position of Chairman for another 2 year position.

It was proposed that having the Vice-Chairman transition directly into the Chairman position would allow for more consistency. Discussion noted that the Vice-Chair may not want to serve in a four year capacity. Discussion determined that there would not be a benefit to changing the current system of electing Chairman and Vice-Chairman. It was felt that the current system worked well for the frequency that the MAC physically meets, which is once per year.

Consensus – There will be no change to the current system of electing Vice-Chairman and Chairman, or the length of time that they serve in their position.

- g. Vector Network analyzers and the issue of traceability for the calibration and verification kits.

Bill Sorrells requested to form a working group for the purpose the creation of a document based on the Euromet document for ensuring traceability for Vector Network Analyzers. He noted that the Euromet document proposed the use of certain artifacts for a “traceability kit” that establishes traceability for this equipment.

It was felt that this issue needs further research and as such it was proposed that a working group be formed to create a document that would define what a “traceability kit” is comprised off and what components would need to have accredited calibrations.

Action Item 4 – P. Wright to add an item to Agenda for MAC meeting during 2009 Conclave to request volunteers for task group to update document regarding “traceability kit” for vector network analyzers and create a guidance document for A2LA.

Due Date: April 4, 2009 at 2009 Conclave.

Addendum:

3/12/09 – Teleconference between Mike Suraci, Jeff Gust and Mike Lombardi [from NIST, CO] regarding the issue of frequencies lower than one Hertz. This issue stemmed from an AC negative vote which led to an agreement to form a MAC working group to determine whether a policy should be required to limit the frequency range of a scope of accreditation to 1 Hz or a policy to require a laboratory to supply a practical application for the use of a frequency lower than 1 Hz [in conjunction with demonstration of technical proficiency at the frequency requested with inclusion of appropriate uncertainty analyses] if seeking a frequency range lower than 1 Hz on their scope of accreditation. Jeff Gust, Mike Suraci and Mike Lombardi already agreed to participate in this working group. Jason Poore to serve as staff contact.

Action Item 5: P. Wright to request an addendum to the April MAC Agenda to seek volunteers willing to join the working group formed to develop a proposed policy for laboratories who want to claim a frequency lower than 1 Hz on their scope of accreditation.

Due Date: April 4, 2009 at 2009 Conclave

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