Voluntary EMC Laboratory Accreditation Center, Inc.

# Proposal for an APLAC Proficiency Testing Program on

## T061: Electromagnetic Interference Testing

## 1. Objective of the program

The main objective of the program is to evaluate the competence of EMC testing laboratories in appropriately maintaining characteristics of their measuring facilities and instruments used for measurement of radiated and conducted electromagnetic interference.

### 2. Program administration

The program is organized and operated by the Voluntary EMC Laboratory Accreditation Center, Inc. of Japan (VLAC) under the auspices of the Asia-Pacific Laboratory Accreditation Cooperation (APLAC). VLAC is responsible for coordinating activities relevant to this program such as inviting participants, assigning confidential codes to participants, preparing instructions, circulating an artifact (testing sample), collecting and analyzing results and preparing final report as well as the interim reports.

## 3. Recruitment of participants

APLAC members as well as members of EA and IAAC and other accreditation bodies outside APLAC will be invited for the program. Invitations will be sent to all APLAC members and other accreditation bodies in July 2008.

## 4. Participants group size and handling of artifact

Participating accreditation bodies will be asked to nominate signing up laboratories with indication whether they are accredited or not. Preference should be given to laboratories that are accredited for this test.

The number of participating laboratories will be limited to 4 per accreditation body to allow time for VLAC to collect artifact and confirm its characteristics between its circulation in one accreditation body group and the next.

One week will be given to a participating laboratory including day for receiving and forwarding artifact. Two weeks will be given to a parent accreditation body for receiving and returning artifact from/to VLAC.



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#### 5. Testing method

The program participants will be requested to carry out the following measurements at specified frequencies based on CISPR22.

The instruction on testing is given in  $\ensuremath{\textbf{Appendix}}\ 2$ 

- Measurement of radiated disturbance (Electromagnetic Field Strength at 3 m distance)
- Measurement of conducted disturbance at mains port (Disturbance voltage using AMN)

#### 6. Testing sample

An artifact is circulated to the participating laboratories as EUT (testing sample) for this program. The artifact is an impulsive noise generator (comb generator); Model PTE-2 (Serial No. 004). It can be operated by AC mains voltage from 100V to 240V. For the proficiency testing program this time, the operating voltage of artifact will be specified to AC 100V $\pm$ 3V. Also for the measurement of radiated interferences, a VHF-LISN will be supplied by VLAC to stabilize the impedance between the line and ground of AC mains at the testing site. A VHF-LISN will be circulated together with the artifact. Measurement arrangement of the artifact and VHF-LISN is also indicated in **Appendix 2**.

#### 7. Application fee

Free of charge.

#### 8. Program time frame

To be determined later considering the number of enrolling accreditation bodies and laboratories under them.

#### Provisional schedule table

July 2008Send out the invitation letter to the accreditation bodiesAugust to September 2008Accepting the application from Accreditation BodySeptember 2008Inform the circulation schedule to the Accreditation BodyFrom October 2008to December 2009Circulate the artifactJanuary 2010Collect all results and analysis of dataApril 2010Issue the interim reportJune 2010Issue the final report

#### 9. Application for participation

Application window: August 1 – September 30, 2008 Please send form in **Appendix 1** filled out to the VLAC Proficiency Testing Program Office



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#### 10. Confidentiality

For this program the participated laboratory has been allocated the code number shown on the data sheet. All reference to your laboratory in reports associated with this program will be with this code number, thus ensuring confidentiality of results.

11. Office of Proficiency Testing Program VLAC Technical Center PT Program Department Convenor: Mr. Kunihiro Osabe E-mail: <u>osabe@vlac.co.jp</u> Co-convenor: Ms. Junko maeda E-mail: <u>jmaeda@vlac.co.jp</u> Phone: +81-3-3568-2152 Fax: +81-3-3568-2153