

Republic of the Philippines  
Commission on Elections

TECHNICAL EVALUATION COMMITTEE

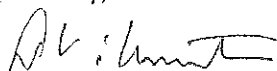
12 February 2013

ATTY. JOSE M. TOLENTINO, JR.  
PMO Project Director  
AES 2013

Sir:

Respectfully submitting the attached Technical Evaluation Committee Resolution No. 2013-001 dated 12 February 2013 for your appropriate action.

Sincerely,



Denis F. Villoriente  
Director, ASTI-DOST and  
Chairman, TEC

cc:

- Hon. Mario G. Montejo - Secretary, DOST
- Hon. Louis Napoleon C. Casambre - Exec. Director, ICTO
- PMO Secretariat

COMMISSION ON ELECTION  
PROJECT MANAGEMENT OFFICE

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DATE: 2/13/13 TIME: 10:00 AM

## TECHNICAL EVALUATION COMMITTEE

### Resolution No. 2013-001

#### RESOLUTION ON THE CERTIFICATION OF AUTOMATED ELECTION SYSTEM (AES) FOR THE MAY 13, 2013 NATIONAL AND LOCAL ELECTIONS

**WHEREAS**, the Commission on Elections (COMELEC) has procured, for use in automating the May 13, 2013 National and Local Elections, the Smartmatic Auditable Election System (SAES), consisting of the following system components:

A. Election Management System (EMS)

Manufacturer	Application	Version
Smartmatic	Election Management System (EMS)	4.5.F.2013.E.010.016
Dominion	Election Event Designer (EED)	3.8.PH-02(Internal EED version 3.8.4224.26703-PH03)
Dominion	Election Programming Station (EPS)	1.0.5.PH(Internal EPS version 3.50)

B. Precinct Count Optical Scan (PCOS)

Manufacturer	Application	Version
Dominion	Precinct Count Optical Scanner (PCOS) firmware	4.4.3-PH

C. Canvassing/Consolidation System (CCS)

Manufacturer	Application	Version
Smartmatic	Real-time Election Information System (REIS) Listener	4.5.F.2013.L.011
Smartmatic	Real-time Election Information System (REIS)	4.5.F.2013.R.010.016

**WHEREAS**, Section 10 of Republic Act No. 9369 provides for the creation of a Technical Evaluation Committee (TEC), which shall be "... composed of a representative each from the Commission [on Elections], the Commission on Information and Communications Technology and the Department of Science and Technology who shall act as chairman of the Committee.";

**WHEREAS**, Section 11 of the same Act, mandates that "the Committee shall certify, through an established international certification entity to be chosen by the Commission from the recommendation of the Advisory Council, not later than three months before the date of the electoral exercises, categorically stating that the AES, including its hardware and software components, is operating properly, securely, and accurately, in accordance with the provisions of this Act based, among others, on the following documented results:

1. The successful conduct of a field testing process followed by a mock election event in one or more cities/ municipalities;
2. The successful completion of audit on the accuracy, functionality and security controls of the AES software;
3. The successful completion of a source code review;
4. A certification that the source code is kept in escrow with the *Bangko Sentral ng Pilipinas*;
5. A certification that the source code reviewed is one and the same as that used by the equipment; and
6. The development, provisioning, and operationalization of a continuity plan to cover risks to the AES at all points in the process such that a failure of elections, whether at voting, counting or consolidation, may be avoided."

**WHEREAS**, COMELEC contracted the services of SLI Global Solutions (SLI, formerly Systest Labs), based in Denver, Colorado, USA, to conduct the AES certification testing for the 2013 National and Local Elections. SLI was the same international certification entity which conducted the review of the AES used during the May 10, 2010 Automated National and Local Elections and the AES enhancements for the scheduled 2011 ARMM Elections;

**WHEREAS**, the SAES was submitted to SLI for certification testing;

**WHEREAS**, SLI has conducted certification testing of said submitted system, to ascertain its compliance with provisions of RA 9369, RA 8436, and COMELEC's AES requirements, using applicable portions of the US Election Assistance Commission's 2005 Voluntary Voting System Guidelines;

**WHEREAS**, there has been a successful completion of audit on the accuracy, functionality and security controls of the submitted system based on the Final Certification Test Report Summary (herein attached as Annex A) where SLI concludes "that the AES is functionally capable of operating properly, securely and accurately

and ... recommends the system for certification as it is conformant with operational requirements and is suitable for use in applicable future elections”;

**WHEREAS**, there has been a successful completion of a source code review, based on the Final Certification Test Report of SLI, which in its Source Code Review Conclusions, states:

*“After reviewing submissions of the subject source code, all of the programming issues that SLI’s reviewers had identified through their review for compliance were determined to have been addressed by the vendor. As of this date, all of the specific findings identified as “Critical” or “Major” have been resolved, and the source code is in compliance with the set of VVSG requirements that the source code has been inspected for. There were no instances discovered of any intentionally malicious code having been written by the vendor and included in the voting system source code.”*

**WHEREAS**, there has been a successful conduct of a field testing process followed by a mock election event, based on the certification issued on February 7, 2013 by the COMELEC through its PMO Project Director for the May 13, 2013 Automated Elections (herein attached as Annex B);

**WHEREAS**, COMELEC through its PMO Project Director, in its letter to the TEC dated 9 February 2013 states:

*“...please be informed that the Commission has been in constant communication with both Dominion Voting System and Smartmatic-TIM relative to the issuance of the 2011 PCOS code so that the same may be deposited in escrow with the Bangko Sentral ng Pilipinas. In the meantime, said 2011 PCOS code is deposited in escrow with SLI Global Solutions, Inc., the international certification entity engaged by the Commission to conduct the AES code review. As regards the PCOS binaries, CCS code and other applications built by SLI Global System, Inc. during the Trusted Build activity in Manila last January 10, 2013, the same shall be deposited with the Bangko Sentral ng Pilipinas as soon as the new Escrow Agreement is agreed upon and finalized.”*

**WHEREAS**, a trusted build was conducted in Denver for the Dominion components of the SAES and another trusted build was conducted in Manila for the Smartmatic components by which the binary codes for the system and their corresponding hash codes were generated from the reviewed source codes (herein attached as Annex C);

**WHEREAS**, based on a review of the AES installation, configuration, verification and, validation procedures being used by COMELEC (herein attached as Annexes D & E ), its proper and strict implementation provide sufficient mechanism and controls to ensure that the source code reviewed is (or will be) one and the same as that installed in the PCOS, CCS, and EMS machines;

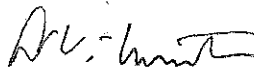
**WHEREAS**, a continuity plan (herein attached as Annex F ), which covers all risks to the election at all points in the process such that a failure of elections, whether at voting, counting, or consolidation, may be avoided, has been approved and adopted by COMELEC;

**WHEREAS**, compensating controls (herein attached as Annex G) are available for adoption by COMELEC to mitigate the risks identified during the AES certification testing process;

**NOW THEREFORE**, the Technical Evaluation Committee, having considered the totality of the certification test artifacts, findings logs, corresponding continuity plan, the on-site evaluation of field test and mock elections, systems acceptance and certification test reports as herein identified, **RESOLVED** as it hereby **RESOLVES**, to certify, that the AES, as submitted, with full adoption of the recommended compensating controls, can operate properly, securely, and accurately be used by the voters, boards of election inspectors, local and national boards of canvassers, and COMELEC in the May 13, 2013 National and Local Elections.

**FURTHER RESOLVED**, as it hereby **RESOLVES**, that to comply with the requirements under RA 9369, the AES source code as submitted and reviewed should be kept in escrow with the *Bangko Sentral ng Pilipinas*.

Adopted this 12<sup>th</sup> day of February 2013.



**DENIS F. VILLORENTE**

**Chairman**

Advanced Science and Technology Institute  
Department of Science and Technology



**FERDINAND P. DE LEON**

**Member**

Commission on Elections



**REYNALDO L. SY**

**Member**

Information and Communications  
Technology Office (formerly CICT)