


'11 MAY 11 P2:25

SENATE  
S. No. **2816**

RECEIVED BY: 

---

Introduced by Senator Miriam Defensor Santiago

---

EXPLANATORY NOTE

The Constitution, Article 5, Section 2, paragraph (1) provides:

The Congress shall provide a system for securing the secrecy and sanctity of the ballot as well as a system for absentee voting by qualified Filipinos abroad.

The May 2010 Presidential Elections cannot be considered a perfectly executed implementation of the automated election law. Critics point out the lapses in the way the Commission on Elections (Comelec) carried out the last national elections, such as the absence of digital signatures and a weak verification system of the installed software.

At present, there is no feature that allows for the verification of the software installed in the PCOS and CCS machines and all other components of the AES system. The Hash Code extracted by the Forensic Team from the PCOS machines used in Antipolo is not the same as the one published on the COMELEC website. The Hash Code of the software in the PCOS machine is there to ensure that the same copy of the reviewed software and stored in escrow at the Bangko Sentral is the same as those installed in more than 76,000 PCOS machines.<sup>1</sup>

There is therefore a need to amend the automated election law to safeguard the integrity of the electoral process. While the last election may have been considered acceptable, there is still a large room for improvement. These proposed amendments were submitted by the Center for People Empowerment and Governance to the Joint Congressional Oversight Committee on the Automated Election System.


  
MIRIAM DEFENSOR SANTIAGO  
*ms*

---

<sup>1</sup> Legislative Proposals to Improve and Enhance the Automated Elections Law (RA 9369) by the Center for People Empowerment in Government (CENPEG) 25 April 2011.

'11 MAY 11 P2:25

SENATE  
S. No. 2816

RECEIVED BY: 

---

Introduced by Senator Miriam Defensor Santiago

---

1 AN ACT  
2 AMENDING SECTION 6 OF REPUBLIC ACT NO. 8436, ALSO KNOWN AS  
3 "AN ACT AUTHORIZING THE COMMISSION ON ELECTIONS TO USE AN  
4 AUTOMATED ELECTION SYSTEM IN THE MAY 11, 1998 NATIONAL OR LOCAL  
5 ELECTIONS AND IN SUBSEQUENT NATIONAL AND LOCAL ELECTORAL  
6 EXERCISES," AS AMENDED BY REPUBLIC ACT NO. 9369, ON THE  
7 MINIMUM SYSTEM CAPABILITIES OF THE AUTOMATED ELECTION SYSTEM

*Be it enacted by the Senate and the House of Representatives of the Philippines in Congress assembled:*

8 SECTION 1. Section 6 of Republic Act No. 8436, as amended by Republic Act No.  
9 9369, is hereby amended to read as follows:

10 "SEC. 6. *Minimum System Capabilities.* – The automated election system must at least  
11 have the following functional capabilities:

- 12 (a) Adequate security against unauthorized access;
- 13 (b) Accuracy in recording and reading of votes as well as in the tabulation,  
14 consolidation/ canvassing, electronic transmission, and storage of results;
- 15 (c) Error recovery in case of non-catastrophic failure of device;
- 16 (d) System integrity which ensures physical stability and functioning of the vote  
17 recording and counting process;
- 18 (e) [Provision for voter verified paper audit trail] PROVIDE THE VOTER A  
19 SYSTEM OF VERIFICATION TO FIND OUT WHETHER OR NOT THE MACHINE HAS  
20 REGISTERED HIS CHOICE, USING ONE OR MORE OF THE FOLLOWING  
21 ESTABLISHED VOTER VERIFICATION PROCEDURES:
- 22 (i) VOTER VERIFIED PAPER AUDIT TRAIL (VVPAT)
- 23 (ii) VOTER VERIFIED VIDEO AUDIT TRAIL (VVVAT)

- 1 (iii) VOTER VERIFIED AUDIO AUDIT TRAIL (VVAAT)
- 2 (iv) VOTER VERIFIED BRAILLE AUDIT TRAIL
- 3 (f) System auditability which provides supporting documentation for verifying the  
4 correctness of reported election results;
- 5 (g) An election management system for preparing ballots and programs for use in the  
6 casting and counting of votes and to consolidate, report and display election result in the shortest  
7 possible time;
- 8 (h) Accessibility to illiterates and [disabled] DIFFERENTLY-ABLED voters;
- 9 (i) Vote tabulating program for election, referendum or plebiscite;
- 10 (j) Accurate ballot counters;
- 11 (k) Data retention provision;
- 12 (l) Provide for the safekeeping, storing and archiving of physical or paper resource  
13 used in the election process;
- 14 (m) Utilize or generate official ballots as herein defined;
- 15 (n) Provide the voter a system of verification to find out whether or not the machine  
16 has registered his choice; [and]
- 17 (o) Configure access control for sensitive system data and function;
- 18 (P) PROVIDE A FEATURE THAT WILL ALLOW VERIFICATION IF THE  
19 SOFTWARE INSTALLED IN ANY COMPONENT OF THE AES IS ONE AND THE SAME  
20 AS THAT HELD IN ESCROW WITH THE BANGKO SENTRAL NG PILIPINAS. THE  
21 VERIFICATION CODE SHALL BE PRINTED OUT AND COPIES OF THE PRINTOUT  
22 SHALL BE POSTED ON THE DOOR AND WALL OF THE PRECINCT/ CANVASSING  
23 CENTER. THE VERIFICATION SHOULD BE PART OF THE INITIALIZATION  
24 PROCEDURE EXECUTED BY THE BEI OR BOC;
- 25 (Q) PROVIDE THE CAPABILITY OF DIGITAL SIGNING OF ALL SOFTCOPY  
26 DOCUMENTS (ER, COC, SOV, ETC) USING COMPUTER-INDUSTRY-STANDARD  
27 SECURE PRIVATE-PUBLIC KEY CRYPTOSYSTEM THAT UTILIZES ESTABLISHED  
28 CERTIFICATE AUTHORITIES OR DTI-ACCREDITED CERTIFICATE AUTHORITY; AND

1 (R) PROVIDE THE CAPABILITY OF DIGITAL SIGNING OF ALL SOFTCOPY  
2 DOCUMENTS USING SIGNING HARDWARE THAT DOES NOT COMPROMISE THE  
3 PRIVATE KEY OF THE SIGNER, SUCH AS BY EMPLOYING PROCESSOR SMART  
4 CARDS FOR REACH SIGNER AND PROCESSOR SMART CARD READERS FOR EACH  
5 COMPUTER EQUIPMENT.

6 In the procurement of this system, the Commission shall develop and adopt an evaluation  
7 system to ascertain that the above minimum system capabilities are met. This evaluation system  
8 shall be developed with the assistance of an advisory council. THE COMMISSION IS  
9 REQUIRED TO PROCURE COMPUTER HARDWARE AND SOFTWARE SYSTEMS THAT  
10 INCLUDE ALL OF THESE CAPABILITIES. ”

11 SECTION 2. *Repealing Clause.* – Any law, presidential decree or issuance, executive  
12 order, letter of instruction, administrative order, rule or regulation contrary to, or inconsistent  
13 with, the provisions of this Act is hereby repealed, modified or amended accordingly.

14 SECTION 3. *Effectivity Clause.* – This Act shall take effect fifteen (15) days after its  
15 publication in at least two (2) newspapers of general circulation.

Approved,