



PoP 2010

Poolitikang Pinoy 2010

Volume 1 • Issue 6 • January 2010

Beyond Pollwathing

AUTOMATION? WHAT THE FACT?

“Automation” certainly is a buzzword nowadays. We are all looking forward - some with fear, others with excitement, or a combination of both - to having our very first nationwide automated elections in May 2010. This has been viewed by many as a giant leap for Philippine elections, which have been marred by numerous cases of violence and fraud, and is believed to be vulnerable to acts of cheating because of the manual tallying system that we used to have.

A staggering PhP11.2 billion was allotted for the automation of the 2010 elections, with the Smartmatic-TIM Consortium getting the project for a cost of PhP 7,191,484,739.48.

The automation project is divided into three components, namely:

1) Paper-based automated election system (AES), which includes election management, the precinct-count optical scan (PCOS) system and the consolidation/canvassing system (CCS)

2) Provision for electronic transmission of election results using public telecommunications network

3) Overall project management

ARE WE READY?: Automation Figures

- Estimated 48 million voters (a 1 million increase after the extended registration last December)
- 80 provinces, 1,631 cities and

municipalities (number of cities increased after the Supreme Court ruling on new cities)

- 320,415 Established Precincts (estimated number)
- 80,136 Clustered Precincts (estimated number)
- 37,884 Polling Centers (estimated number)
- 82,200 PCOS Machines to be distributed as follows:

Luzon	43,412
Visayas	17,820
Mindanao	18,904
TOTAL	80,136

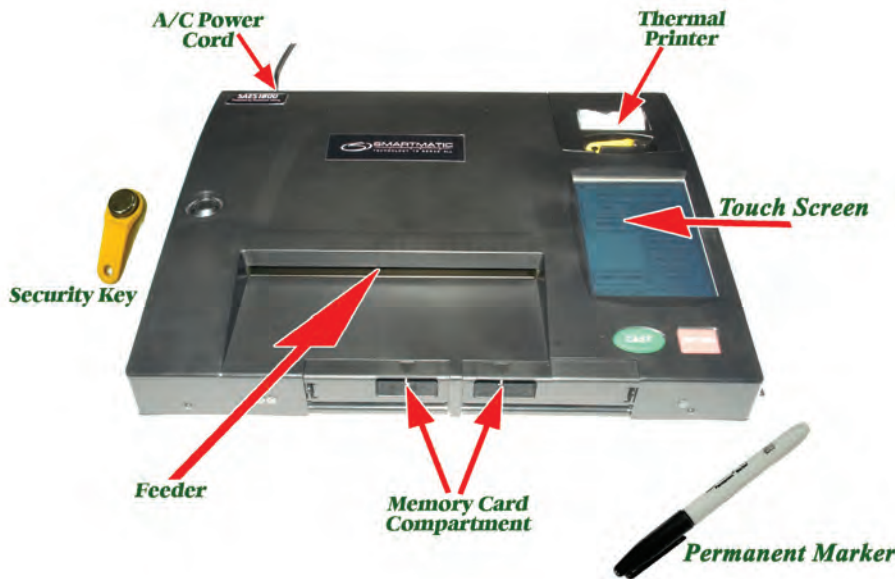
Back-up machines (for contingency): 2,064

The full amount shall be paid to Smartmatic-TIM according to the following schedule:

Project initialization, set up of Project Management Team (PMT) and Project Systems including all Software (SW) licenses & firmware	10%
Delivery of Development Set (20 units)	5%
Report on Transmission and Logistics	5%
Delivery of functional system and Software Agreement	5%
Delivery of Event Management System (EMS) and Consolidation/ Canvassing System (CCS) (hardware, software and Website)	5%
Complete system including customization and voter education materials/website	5%
Field testing, mock election, TEC Systems Certification, training of trainers	5%
Delivery of PCOS Machines (Nov 2009 – 12K; Dec 2009 – 30K)	17.5%
Second Delivery of PCOS Machines (Jan 2010 – 30K; Feb 2010– 10.2K)	17.5%
Commencement of ballot production	2.5%
Delivery of ballots	7.5%
Configuration of machines, final checking of systems, including transmission and sealing	5%
Subtotal	90%
Election Day services & completion report and Final Acceptance in lieu of retention of Warranty Security, within thirty (30) days from receipt of Final Report	10%



It looks simple to operate, doesn't it? The PCOS machine has the following parts:



The Technology

If you can easily operate your mobile phone, then you will find it easy to cast your vote using the precinct-count optical scan (PCOS) machine, the approved machine for the 2010 automated elections.

The PCOS is a paper-based technology that uses paper ballots where the names of the candidates are pre-printed.

The paper ballots are then fed into the machine after shading the ovals



next to the names of candidates (as you may have seen in the infomercial of a popular TV network). Permanent markers are also provided for shading. According to tests, the technology has a 99.99999% accuracy rate. The machine scans both sides of the paper ballot in a single pass and stores a digital image of the ballot in the machine's memory card. Fake, photocopied, invalid and previously scanned ballots are automatically rejected by the machine. In far-flung areas where there may be insufficient power sources or where there is no electricity, the machine has a back-up battery that allows it to run for 12 hours.

Ballots casted are kept in a transparent box attached to the machine.

The ballots can contain, at most, 600 names of candidates, and these are precinct-specific – a ballot in one precinct cannot be used (and accepted by the machine) in another precinct. Extra ballots from one precinct, thus, cannot be brought

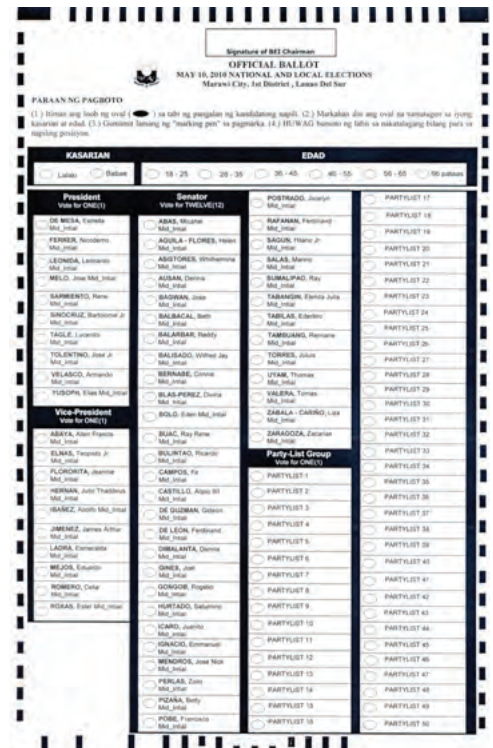
to another precinct for flying voters to use. Ballots may be fed into the machine in any orientation (both sides are simultaneously scanned anyway).

Clustered precincts (at most five precincts in one cluster, with a maximum of 1,000 voters), are manned by a Board of Election Inspectors (BEI) composed of at least three regular members: the Chairperson, Poll Clerk and support staff (the number of which depends on the size of the clustered precinct). Only the BEI Chair can hand over the ballot to the voter.

Automated election procedures

• Testing/Sealing of Machines and Voting

At least three days before the elections, the public shall accomplish test ballots, which shall be manually counted (election returns or ERs are also accomplished). The same ballots are fed into the PCOS machines and a comparison of the results of



the manual ballot count and the automated ballot count will be made. The result of both counts should tally. If they tally, the election returns (manual and automated) are signed by witnesses. The machines are then sealed without any connection to transmission links.

The public is allowed to ensure the security of the place where the counting machines are installed. The only time that the counting machines shall be opened is on election day, in the presence of watchers.

Voting starts at 7:00 a.m. and ends at 6:00 p.m. Before voting starts, the Board of Election Inspector (BEI) will show that the ballot box is empty (again, the box is transparent so you can see if it is empty or not). The BEI Chair then switches ON the machine and initializes it. A "zero report" is then printed to show that there is no entry or vote in the machine's memory.

At least 15-20 voters can cast their votes at any given moment in a clustered precinct. With the clustering of precincts, voters may have to line up for their turn to vote. It is the job of the Poll Clerk to organize the queue of voters waiting for their turn.

TAKE NOTE!

The COMELEC and other groups doing information campaign on the voting process should always remind the public that the machines may consider a no-vote or an under-vote (when a voter does not vote for a particular position OR does not fill all the allowed votes for a particular position - e.g. only 5 of 12 senators). What the machines consider as "void" (not counted) is an over-vote - e.g. 13 candidates chosen for senator instead of 1 or 2 names for president instead of 1.

This makes it necessary for you to be very careful in shading the ovals.

• Counting of Votes

At the end of the voting period, the BEI Chair shall perform the "close" function to prevent additional ballots from being inserted into the machine, after which the machine automatically starts counting the votes. After the count, the machine prints eight (8) copies of the election returns.

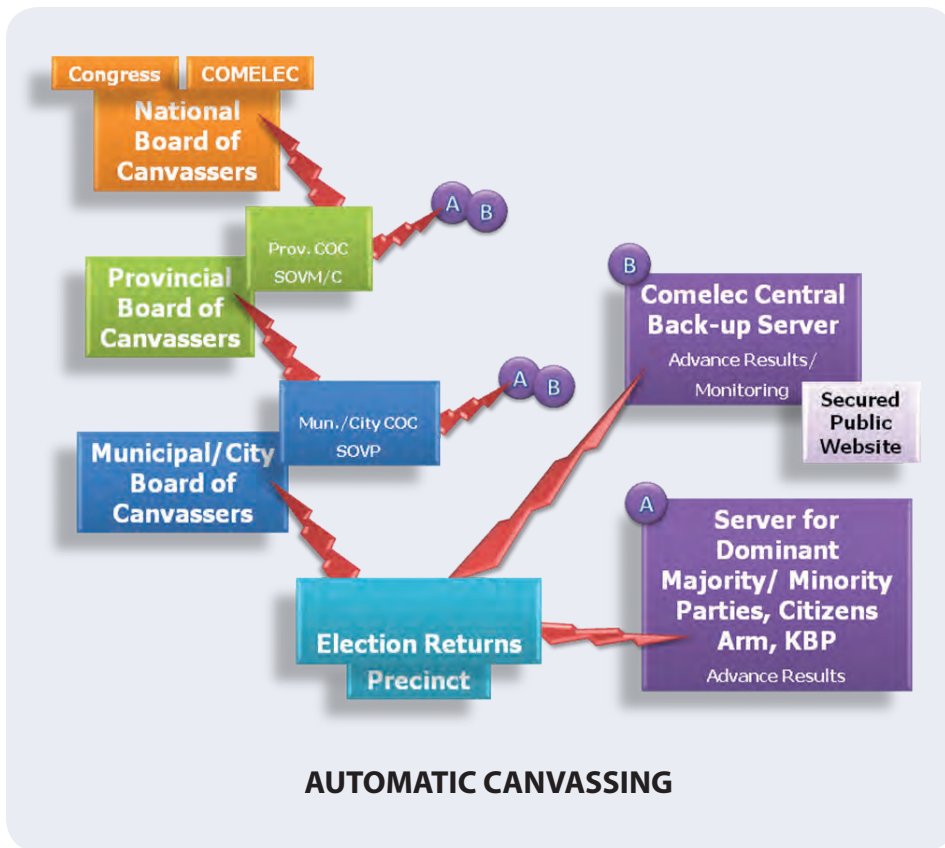
When the copies of the ERs have been printed, the BEI Chair then inserts the transmission cable. Only after the printing of eight ERs can the cable be inserted. This is to eliminate the possibility and make

sure that the machine cannot be manipulated remotely. The machine then will electronically transmit the results to the city/municipal board of canvassers. It will also simultaneously transmit the results to the COMELEC Central back-up server and to the servers of the dominant majority/ minority parties and official citizens arm.

• Canvassing and Consolidating

The diagrams below show the difference in the canvassing of votes when it is done manually (left diagram) versus when it is done automatically (right diagram):





Still wary about the integrity of automation? FEAR NOT.

If the system (the machine, that is) breaks down, the COMELEC offers contingency plans so we can still push through with the casting of votes.

Here are possible scenarios of a system breakdown and what the COMELEC suggests we do in case any of these happens:

1. The PCOS machine fails to scan.
 - a. Use spare PCOS.
 - b. Use PCOS of another precinct.
 - i. Wait for other PCOS to complete process in its precinct.
 - ii. Get PCOS and reconfigure for next precinct.
 - iii. Scan ballots.
 - c. If all PCOS fail: do manual counting.
2. PCOS machine is able to scan ballots but fails to print.
 - a. Use spare PCOS.
 - b. Use PCOS of another precinct.
 - i. Wait for other PCOS to complete process in its precinct.
 - ii. Get PCOS and reconfigure for next precinct.
 - iii. Use removable storage device of defective PCOS and let replacement PCOS print the ER.
 - c. If all PCOS fail: do manual counting.
3. PCOS machine is able to print ER but fails to transmit.
 - a. Go to the nearest precinct or polling center which has a functioning transmission facility.
 - b. Use removable storage device of defective PCOS and let the functioning facility transmit precinct results.

c. If all transmission facilities bog down, physically transport PCOS & removable storage device to canvassing site in the presence of watchers and security escorts.

4. Consolidation/Canvassing System (CCS) is able to transmit but fails to consolidate
 - a. Use CCS of another municipality/province.
 - b. Use the removable storage device and let functioning CCS consolidate the results.
 - c. Provide back-up canvassing through the Central Server.

For more information on the 2010 automated elections, you may visit:

http://www.comelec.gov.ph/modernization/2010_natl_local/information_material.html
http://comelec.files.wordpress.com/2009/12/com_res_8739.pdf

**All photos and figures presented are from COMELEC.*

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Poolitikang Pinoy 2010 (PoP 2010) is a monthly election fact sheet published by the Ateneo School of Government (ASoG) with support from Friedrich-Ebert-Stiftung (FES).

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