

# From a Legal Perspective: The May 10, 2010 **Automated Elections**

After several Supreme Court decisions upholding the right of the public unhampered access to Comelec's relevant files, the investigation on the truthfulness of the fraud allegations should now proceed immediately. To dilly-dally even more would endanger the reliability of the results that may emanate therefrom. Clearly the public, especially its information technology experts, needs no saving from their inquisitive selves. We need saving from those who would want to save us without telling us why.

The tasks were, and still are, almost akin to *saving a fish from drowning*. The narrative remains rivetingly, though already seemingly stale, paradoxical - the automated May 10, 2010 elections that we as a people are commanded to trust in wholeheartedly, without asking questions and expecting answers, as if, to save ourselves from our own natural habitat, the supposed source of our own perdition. The entire official discourse about this public event, the May 10, 2010 elections, is for us to be happy that we have been redeemed not just from the trouble and effort of seeking solutions to never-ending queries, anyway dismissed because either they are irrelevant or downright subversive for they dampen the self-congratulatory spirit of an elections well done, but also from the nuisance that asking too many questions, and thinking about them, bring about. In not so many words, as if the Commission on Elections were telling us, "Just believe that we did the right thing, Smartmatic's PCOS the perfect job, as very well confirmed by the election of an overly popular candidate as President! The means justifies the result as the result corroborates the means."

Talking about the core of democracy in this country is like lifting this passage from Amy Tan's Saving a Fish from Drowning, so enigmatic, so full of meaning, so funny – sadly in the context of the May 10, 2010 elections so much at our expense:

A pious man explained to his followers: "It is evil to take lives and noble to save them. Each day I pledge to save a hundred lives. I drop my net in the lake and scoop out a hundred fishes. I place the fishes on the bank, where they flop and twirl. 'Don't be scared,' I tell those fishes. 'I am saving you from drowning.' Soon enough, the fishes grow calm and lie still. Yet, sad to say, I am always too late. The fishes expire. And because it is evil to waste anything, I take those dead fishes to market and I sell them for a good price. With the money I receive, I buy more nets so I can save more fishes."

Indeed talk about *naluto at niluluto sa sariling mantika*. For this fact alone there is much to scour and to discuss, no matter that some, if not most apparently, are so satisfied with the outcome of the automated elections. From a lawyer's prism, the legal perspective, what exactly happened at the May 10, 2010 elections?

We, the sovereign Filipino people...

The overarching precept in every election is undoubted. Free, orderly, honest, peaceful, and credible elections - as the Constitution so straightforwardly mandates. Meaningful suffrage emanates from it. Commission on Elections succeeds in its job because of it. The statutes and the jurisprudence that take care of the details of every electoral contest merely implement the rules for this objective.



## Not just procedures or systems

Yet elections cannot just be about procedures or systems. They are equally for, if not more, the people that make up the nation and the individual that constitutes the polity. The individual voter's right to privacy, which is guaranteed by the call towards *secrecy in voting*, is meant to secure *free elections*. The collective's right to *credible elections* bridges the voter's expectation from the moment of voting that his or her vote is counted, a right that is served by *public counting*. An electoral system is therefore both private and public where the center is the human factor, that is, the people's voice is the sovereign.

Hence elections, just as are the governments built out of them, must be for the Filipinos, with the Filipinos, by the Filipinos, individually and collectively. The *Constitution's Preamble* precisely begins with it – sovereignty which elections serve to actualize and memorialize is *We, the sovereign Filipino people*. Besides there can be no *free, orderly, honest, peaceful, and credible elections* if aliens would ultimately and in reality are the ones responsible for its conduct – they really have no stake but the profits they rake in, are beyond effective control as they can easily flee jurisdiction and invoke conflict of laws devices. Clearly every meaningful election to be *free, orderly, honest, peaceful, and credible* ought to be more than these for it must also be run and managed for, with and by the *sovereign Filipino people*, if *we* are to meet in the first place these standards.

## Monday-morning-quarter-backing

The May 10, 2010 election is special. After a long time, to contrast with the 2004 presidential derby where the incumbent sought the presidency amidst allegations of self-serving use of power and government resources, the presidential elections was a contest among equals. But beyond this, the May 10, 2010 elections was the start-from-scratch, to some hasty and rushed, of the automated elections. Understandably debates were rife on whether this system would work. On one hand, this untested technology was perceived as pregnant with risks and could lead to a disastrous failure of elections; accordingly cheating on a massive scale, but this time facilitated by a machine, could be a real possibility. On the other hand, some were confident, overly perhaps, that nationwide automated elections could be successfully implemented.

Recall how the May 10, 2010 automated elections came to be:<sup>2</sup>

"On December 22, 1997, Congress enacted Republic Act (RA) No. 8436 authorizing the adoption of an automated election system (AES) in the May 11, 1998 national and local elections and onwards. The 1998, 2001, and 2004 national and local polls, however, came and went but purely manual elections were still the order of the day. On January 23, 2007, the amendatory RA 9369 was passed authorizing anew the Comelec to use an AES. Of particular relevance are Sections 6 and 10 of RA 9369 — originally Secs. 5 and 8, respectively, of RA 8436 as amended — each defining Comelec's specific mandates insofar as automated elections are concerned. The AES was not utilized in the May 10, 2000 elections, as funds were not appropriated for that purpose by Congress and due to time constraints.

"RA 9369 calls for the creation of the Comelec Advisory Council (CAC). CAC is to recommend, among other functions, the most appropriate, applicable and cost-effective technology to be applied to the AES. To be created by Comelec too is the Technical Evaluation Committee (TEC) which is tasked to certify, through an established international certification committee, not later than three months before the elections, by categorically stating that the AES, inclusive of its hardware and software components, is operating properly and accurately based on defined and documented standards.

"In August 2008, Comelec managed to automate the regional polls in the Autonomous Region of Muslim Mindanao (ARMM), using direct recording electronics (DRE) technology in the province of Maguindanao; and the optical mark reader/recording (OMR) system, particularly the Central Count



Optical Scan (CCOS), in the rest of ARMM. What scores hailed as successful automated ARMM 2008 elections paved the way for Comelec, with some prodding from senators, to prepare for a nationwide computerized run for the 2010 national/local polls, with the many lessons learned from the ARMM experience influencing, according to the NCC, the technology selection for the 2010 automated elections.

"Accordingly, in early March 2009, the Comelec released the Request for Proposal (RFP), also known as Terms of Reference (TOR), for the nationwide automation of the voting, counting, transmission, consolidation and canvassing of votes for the May 10, 2010 Synchronized National and Local Elections. What is referred to also in the RFP and other contract documents as the 2010 Elections Automation Project (Automation Project) consists of three elaborate components, as follows:

"Component 1: Paper-Based AES. 15 1-A. Election Management System (EMS); 1-B Precinct-Count Optic Scan (PCOS) 16 System and 1-C. Consolidation/Canvassing System (CCS);

"Component 2: Provision for Electronic Transmission of Election Results using Public Telecommunications Network; and

"Component 3: Overall Project Management

"And obviously to address the possibility of systems failure, the RFP required interested bidders to submit, among other things: a continuity plan and a back-up plan.

"Under the two-envelope system designed under the RFP, each participating bidder shall submit, as part of its bid, an Eligibility Envelope that should inter alia establish the bidder's eligibility to bid. On the other hand, the second envelope, or the Bid Envelope itself, shall contain two envelopes that, in turn, shall contain the technical proposal and the financial proposal, respectively.

"Subsequently, the Comelec Special Bids and Awards Committee (SBAC), earlier constituted purposely for the aforesaid project, caused the publication in different newspapers of the Invitation to Apply for Eligibility and to Bid for the procurement of goods and services to be used in the automation project. Meanwhile, Congress enacted RA 9525 appropriating some PhP11.3 billion as supplemental budget for the May 10, 2010 automated national and local elections.

"Of the ten (10) invitation-responding consortia which obtained the bid documents, only seven (7) submitted sealed applications for eligibility and bids which, per Bid Bulletin No. 24, were to be opened on a pre-set date, following the convening of the pre-bid conference. Under the RFP, among those eligible to participate in the bidding are manufacturers, suppliers and/or distributors forming themselves into a joint venture. A joint venture is defined as a group of two or more manufacturers, suppliers and/or distributors that intend to be jointly and severally responsible or liable for a particular contract.

"Among the submitted bids was that of the joint venture (JV) of TIM and Smartmatic, the former incorporated under the Corporation Code of the Philippines. Smartmatic, on the other hand, was organized under the laws of Barbados. For a stated amount, said JV proposed to undertake the whole automation project, inclusive of the delivery of 82,200 PCOS machines. After the conclusion of the eligibility evaluation process, only three consortia were found and thus declared as eligible. Further on, following the opening of the passing bidders' Bid Envelope and evaluating the technical and financial proposals therein contained, the SBAC, per its Res. No. 09-001, s.-2009, declared the above-stated bid of the JV of TIM-Smartmatic as the single complying calculated bid. As required by the RFP, the bid envelope contained an outline of the joint venture's back-up and continuity or contingency plans, in case of a systems breakdown or any such eventuality which shall result in the delay, obstruction or nonperformance of the electoral process.



"After declaring TIM-Smartmatic as the best complying bidder, the SBAC then directed the joint venture to undertake post-qualification screening, and its PCOS prototype machines — the Smarmatic Auditable Electronic System (SAES) 1800 — to undergo end-to-end testing to determine compliance with the pre-set criteria.

"In its Memorandum of June 01, 2009, on the Subject: Systems Evaluation Consolidated Report and Status Report on the Post-Qualification Evaluation Procedures, the SBAC Technical Working Group (TWG) stated that it was undertaking a 4-day (May 27 to May 30, 2009) test evaluation of TIM and Smartmatic's proposed PCOS project machines. Its conclusion: 'The demo systems presented PASSED all tests as required in the 26-item criteria specified in the [RFP]' with 100% accuracy rating. The TWG also validated the eligibility, and technical and financial qualifications of the TIM-Smartmatic joint venture.

"On June 9, 2009, Comelec, upon the recommendation of its SBAC, the CAC and other stakeholders, issued Resolution No. (Res.) 8608 authorizing the SBAC to issue, subject to well-defined conditions, the notice of award and notice to proceed in favor of the winning joint venture.

"Soon after, TIM wrote Comelec expressing its desire to quit the JV partnership. In time, however, the parties were able to patch up what TIM earlier described as irreconcilable differences between partners.

"What followed was that TIM and Smartmatic, pursuant to the Joint Venture Agreement (JVA), caused the incorporation of a joint venture corporation (JVC) that would enter into a contract with the Comelec. On July 8, 2009, the Securities and Exchange Commission issued a certificate of incorporation in favor of Smartmatic TIM Corporation. Two days after, or on July 10, 2009, Comelec and Smartmatic TIM Corporation, as provider, executed a contract for the lease of goods and services under the contract for the contract amount of PhP7,191,484,739.48, payable as the 'Goods and Services are delivered and/or progress is made in accordance [with pre-set] Schedule of Payments'. On the same date, a Notice to Proceed was sent to, and received by, Smartmatic TIM Corporation."

### Legal contest vs election contract

On July 9, 2009 well-meaning citizens led by Atty. Harry L. Roque, Jr. filed with the Supreme Court a petition impugning the validity and seeking to nullify the July 10, 2009 Comelec-Smartmatic-TIM Corporation automation contract. They argued in sum that (a) the joint venture agreement between Smartmatic and TIM Corporation is an entity from which the Filipino people could not demand accountability, and (b) the PCOS system was unreliable because it was not pilot-tested and did not satisfy minimum systems capabilities.

On September 10, 2009 the Supreme Court denied the petition for lacking in merit. This ruling established in a significant way how legal discourse provided by the Commission on Elections subsequently reacted to issues of the same kind though delving into greater detail. Focus on the following pronouncements of the High Court:

- 1. It does not matter that the joint venture Smartmatic TIM Corporation is not the manufacturer of the voting machines or its inventor. It is enough that this joint venture could "subcontract portions of the goods or services under the automation project."
- 2. It is irrelevant that the automated elections would be run by a foreign entity because elections is not a nationalized activity. It is adequate that the Comelec reserve in the contract supervision and control of the automation project.



- 3. The only role of Smartmatic TIM is to supply the goods necessary for the automation project, such as but not limited to the PCOS machines, PCs, electronic transmission devices and related equipment, both hardware and software, and the technical services pertaining to their operation.
- 4. The PCOS system need not be pilot-tested to ensure its reliability. It does not matter that the winning bidder of the 2010 automation project and the deploying entity/provider in the foreign electoral exercise are different entities. Neither does the law incidentally require that the system be first used in an archipelagic country or with a topography or a voting population similar to or approximating that of the Philippines.
- 5. The PCOS system complied with the minimum systems capabilities, which were determined using "a rigid technical evaluation mechanism" consisting of "a set of 26-item/check list criteria."
- 6. The Supreme Court recognized the importance of the vote-security issue revolving around the issuance of the public and private keys pair to the Board of Election Inspectors, including the digital signatures.
- 7. The real worth of the PCOS system and the machines would come after they shall have been subjected to the gamut of acceptance tests, namely, the lab test, field test, mock election test, transmission test and, lastly, the final test and sealing procedure of all PCOS and CCS units using the actual Election Day machine configuration.
- 8. It is essential that the Source Code for the 2010 AES be made available and opened for review by political parties, candidates and the citizens' arms or their representatives; it cannot be kept secret by the machine manufacturing company and thus deny the public knowledge as to how exactly the machines counted their votes.
- 9. No illicit program could be executed or introduced into the memory card or the PCOS system.

Foresight as Good as if not better than Hindsight

Atty. Roque Jr.'s petition summed up the fears that shadowed the automated elections system: would the PCOS system be reliable and would not this country be beholden to a foreign entity that would now be running the elections of its leaders? The Supreme Court dismissed these concerns and, with the seeming imperviousness of Comelec's *trust-in-the-machine rhetoric*, the Comelec met criticisms of the PCOS system, no matter how substantiated, with lack of transparency and recorded omissions of tasks it was supposed to do. Note that some of the duties that the Comelec did not perform are precisely those that the Supreme Court affirmed in the Roque Jr. petition to be essential to ensuring a *free*, *orderly*, *honest*, *peaceful*, *and credible elections*.

### Token tests

Were the PCOS system and the machines subjected to the gamut of acceptance tests, namely, the lab test, field test, mock election test, transmission test and, lastly, the final test and sealing procedure of all PCOS and CCS units using the actual Election Day machine configuration? They were not. Token testing situations probably – but not the type acceptable to indigenous information technology experts.

Hence in another Supreme Court case, this time at the behest of former Vice President Teofisto Guingona Jr., against the Comelec, the latter was chastised to be open and transparent in all the preparations for the automated elections. The facts upon which this directive was based included:

"1. Smartmatic-Total Information Management Corporation supplied the wrong ultraviolet ink used in the printing of the ballots for the May 2010 elections. The security marks were unreadable by the Precinct Count Optical Scan (PCOS) machines. This prompted Comelec to disable the ultraviolet light



- detector in the PCOS machines, and to buy ultraviolet lamps for P30 million. Director Ferdinand Rafanan of the Comelec's legal department, who challenged Comelec's decision to buy ultraviolet lamps, was quoted as saying, 'Why is Comelec shouldering this expense when it was not its fault that this deficiency came about.'
- "2. Senate Minority Leader Aquilino Pimentel, Jr. then disclosed that election officials bought nearly two million ballot secrecy folders for the May 2010 elections at an overpriced rate of P380 each without any public bidding. Comelec promptly canceled the awarding of the P690 million contract for the supply and delivery of the ballot secrecy folders, which the Bids and Awards Committee of Comelec had recommended to be awarded to OTC Paper Supply for 1,815,000 ballot secrecy folders.
- "3. Another whistle blower, Dr. Arwin Serrano, the citizen's arm representative to the Comelec's Bids and Awards Committee, asked that the bidding for indelible ink be probed as well. According to Serrano, there were two bidders initially. After screening, Texas Resources Corporation was left as the sole bidder. Upon testing of a sample of its indelible ink, the product failed. The ink easily washed off and the mark left by it only appeared after the lapse of a few hours. Undeterred by the failed test, Comelec still used the ink supplied by Texas Resources Corporation.
- "4. Comelec tried to re-bid the contract for the indelible ink. However, it backtracked on its plan saying that the lone bidder did not fail the test after all. Comelec spokesperson James Jimenez was quoted as saying, 'It looks like there is no need to actually re-bid it, not to mention the fact that there is really not enough time left for that.'
- "5. On the second day of the overseas absentee voting in Hong Kong, the PCOS machines at precincts 15 and 16 at the Bayanihan Kennedytown Center failed to accept promptly the ballots shortly after the precincts reopened at 8 a.m. Inspection of the ballots showed no stray or ambiguous marks that could result in their rejection by the PCOS machines. Smartmatic officials blamed the combination of cold and humidity in Hong Kong for the malfunctioning machines.
- "6. In an interview, Cesar Flores, president of Smartmatic, admitted that 'Machines will break on election day, and machines will have to go to contingency procedures and there will be replacements, and there will be cases where no replacements will be available and the Board of Election Inspectors (BEIs) will have to resort to the next-door machines.' Flores explained that hiccups could either be due to hardware failure or operational failure if the paper was inserted incorrectly or some connections were not plugged in. Flores continued, 'It's very important that we say these things to the public and we manage the expectations of people. If you're planning on getting your headlines from machines broken, you're going to run out of space on your front page on election day.'
- "7. This series of unfortunate events and worrisome admissions notwithstanding, the Comelec subsequently approved a resolution awarding Smartmatic a contract amounting to P500 million for the tracking and delivery services of official ballots. No bidding was held for the contract, which Comelec claimed to be an emergency procurement.
- "8. In an en banc resolution detailing the general instructions on the actual conduct of elections, Comelec specifically instructed BEIs not to key in their digital signatures before the PCOS machines transmit election results. Thus, any PCOS machine, including the reserves totalling 10,000 machines, can transmit election results to Comelec's central server even without digital authentication. The results can still be tallied as official results. In other words, even ballots that are not officially printed can be used in any PCOS machine. Official ballots are no longer precinct-specific. The volume of ballots can no longer be monitored. Petitioners call this Court's attention to the fact that reserve PCOS machines can be used to transmit pre-loaded results.



"The Court further takes judicial notice of the fact, as widely reported in print and broadcast media, that with just six days to go before the 10 May 2010 elections, Comelec recalled 76,000 compact flash cards following widespread failure of the PCOS machines to read and tally the votes during the machine test conducted by Comelec and Smartmatic. Comelec spokesman James Jimenez was quoted as saying, 'Right now we are assuming that all of the machines were affected. We have stopped the testing and are pulling out all memory cards for reconfiguration.'"

The sheer absence of initiative on Comelec's part to disclose matters of public concern affecting the automated elections prompted the Supreme Court to remark that:

Respondent's claim that there is no proof a request has been made for the release of the public records mentioned in the petition is belied by its allegation in its own Comment that this matter has already been addressed in the recent case of Roque v. Comelec. Quoting the Court's ruling in that case on the issue of disclosure of the source code, respondent unwittingly admits a prior request for disclosure.

## Comelec promise

The fact that a source code review is not expressly included in the Comelec schedule of activities is not an indication, as petitioners suggest that Comelec will not implement such review. Comelec, in its Comment on the Motion for Reconsideration, manifests its intention to make available and open the source code to all political and interested parties, but under a controlled environment to obviate replication and tampering of the source code.

Petitioners in Roque vs Comelec in fact pressed Comelec for a source code review. To this day, however, Comelec has yet to disclose the source code as mandated by law. In any case, considering the lack of material time, the Court in the exercise of its equity jurisdiction may even dispense with the requirement of proof of a prior demand in this case.

Why the Comelec should refuse to disclose information despite the absence of any legal impediment to do so, is beyond any rational explanation. This is made worse by the fact that the PCOS system and the machines were not subjected to the gamut of acceptance tests, namely, the lab test, field test, mock election test, transmission test and, lastly, the final test and sealing procedure of all PCOS and CCS units using the actual Election Day machine configuration, that were promised by the Supreme Court and the Comelec would ensure the system's reliability and credibility when Atty. Roque's petition was dismissed.

To be sure the idea of source code review is nothing alien to the Comelec. For as early as 2004, in *Information Technology Foundation of the Philippines, Inc. et al. v. Commission on Elections et al.*, G.R. No. 159139, January 13, 2004, the Supreme Court has stressed this matter's importance in assessing the suitability of an automated elections system, to wit:

Respondents argue that the deficiencies relating to the detection of previously downloaded data, as well as provisions for audit trails, are mere shortcomings or minor deficiencies in software or programming, which can be rectified. Perhaps Comelec simply relied upon the BAC Report, which states on page 8 thereof that "Mega Pacific failed in 8 items[;] however these are mostly on the software which can be corrected by re-programming . . . and therefore can be readily corrected."

The undersigned ponente's questions, some of which were addressed to Commissioner Borra during the Oral Argument, remain unanswered to this day. First of all, who made the determination that the eight "fail" marks of Mega Pacific were on account of the software — was it DOST or TWG? How can we be sure these failures were not the results of machine defects? How was it determined that the software could actually be



re-programmed and thereby rectified? Did a qualified technical expert read and analyze the source code for the programs and conclude that these could be saved and remedied? (Such determination cannot be done by any other means save by the examination and analysis of the source code.)

Who was this qualified technical expert? When did he carry out the study? Did he prepare a written report on his findings? Or did the Comelec just make a wild guess? It does not follow that all defects in software programs can be rectified, and the programs saved. In the information technology sector, it is common knowledge that there are many badly written programs, with significant programming errors written into them; hence it does not make economic sense to try to correct the programs; instead, programmers simply abandon them and just start from scratch. There's no telling if any of these programs is unrectifiable, unless a qualified programmer reads the source code.

And if indeed a qualified expert reviewed the source code, did he also determine how much work would be needed to rectify the programs? And how much time and money would be spent for that effort? Who would carry out the work? After the rectification process, who would ascertain and how would it be ascertained that the programs have indeed been properly rectified, and that they would work properly thereafter? And of course, the most important question to ask: could the rectification be done in time for the elections in 2004?

## Gospel truth

Clearly, none of the respondents bothered to think the matter through. Comelec simply took the word of the BAC as gospel truth, without even bothering to inquire from DOST whether it was true that the deficiencies noted could possibly be remedied by re-programming the software. Apparently, Comelec did not care about the software, but focused only on purchasing the machines.

What really adds to the Court's dismay is the admission made by Commissioner Borra during the Oral Argument that the software currently being used by Comelec was merely the "demo" version, inasmuch as the final version that would actually be used in the elections was still being developed and had not yet been finalized.

It is not clear when the final version of the software would be ready for testing and deployment. It seems to the Court that Comelec is just keeping its fingers crossed and hoping the final product would work. Is there a "Plan B" in case it does not? Who knows? But all these software programs are part and parcel of the bidding and the Contract awarded to the Consortium. Why is it that the machines are already being brought in and paid for, when there is as yet no way of knowing if the final version of the software would be able to run them properly, as well as canvass and consolidate the results in the manner required?

The counting machines, as well as the canvassing system, will never work properly without the correct software programs. There is an old adage that is still valid to this day: "Garbage in, garbage out." No matter how powerful, advanced and sophisticated the computers and the servers are, if the software being utilized is defective or has been compromised, the results will be no better than garbage. And to think that what is at stake here is the 2004 national elections — the very basis of our democratic life.

With this backdrop, it did not come as a surprise that the Supreme Court, in former Vice President Guingona's petition, demanded from the Comelec to disclose to the former within two (2) days from notice of this directive the following:

"1. The nature and security of all equipment and devices, including their hardware and software components, to be used in the 10 May 2010 automated elections, as provided for in Section 7 14 of Republic Act No. 9369;



- "2. The source code for review by interested parties as mandated by Section 12 15 of Republic Act No. 9369;
- "3. The terms and protocols of the random manual audit, as mandated by Section 24 16 of Republic Act No. 9369;
- "4. A certification from the Technical Evaluation Committee that the entire Automated Election System is fully functional and that a continuity plan is already in place, as mandated by Sections 9 17 and 11 18 of Republic Act No. 9369; and
- "5. The certification protocol and the actual certification issued by the Department of Science and Technology that the 240,000 Board of Election Inspectors all over the country are trained to use the Automated Election System, as required by Section 319 of Republic Act No. 9369."

And, as if to emphasize further the importance of a source code review, and underscore the Comelec's perfunctory chore to allow it to proceed, on September 21, 2010, upon the petition filed by election watchdog Center for People Empowerment in Governance (CenPEG), the Supreme Court then again ordered the Comelec to release the source code for the review to be made by interested political parties or groups. Why the Supreme Court has to issue this disclosure command, again and again, and what portion of it the Comelec did not understand, defy reasonable justification. This time, with fears of a PCOS breakdown having already been voiced out, to push for a source code review, the High Court for the first time recognized that there was indeed "the backdrop of numerous admissions of errors and claims of fraud."

... establish a Government that shall... secure to ourselves and our posterity the blessings of independence and democracy under the rule of law and a regime of truth...

Fraud claims, or more politely, challenges to the reliability and honesty of the PCOS system, are certainly not wanting to come by. Of late, the result of the mayoralty elections in Pasay City has been put into serious doubts because of defects in the PCOS system. This and other similar events cannot be conveniently ignored by resorting to the same *trust-in-the-machine rhetoric* because to continue doing so would undermine all future efforts at automating the elections. The *Constitution*'s *Preamble* calls for a government that operates under a "regime of truth," thus, truth must be afforded the fullest opportunity to blossom. For starters, as summarized by information technology expert Angel S. Averia Jr., below is a partial list of questionable occurrences relating to the conduct of the May 10, 2010 automated elections, *viz*:

#### Did the AES operate properly, securely, and accurately?

Errors and deficiencies in the Automated Election System observed or discovered before the elections, on election day itself, during the consolidation and canvassing of election results and the conduct of the Random Manual Audit have led observers to ask: Did the AES operate properly, securely, and accurately? The AES was supposed to have been certified by the Technical Evaluation Committee (TEC) that the AES can operate properly, securely, and accurately provided that the proposed compensating controls were implemented. Some errors and deficiencies observed or discovered are as follows:

The source code was never released by the COMELEC to political parties and interested groups for review.

On May 3, 2010, during the conduct of the Final Testing and Sealing (FTS) of the Precinct Count Optical Scan (PCOS) deployed in various clustered precincts, the members of the Board of Election Inspectors in various clustered precincts found that, at the local level, the results of the vote counts



generated by the PCOS did not match the manual count. The error was attributed to the erroneous ballot configurations stored in the CF cards deployed with the machines. The COMELEC immediately issued a recall order of more than 76,000 CF cards so that the correct ballot configurations may be stored in the CF cards.

Warnings from various groups that long queues would develop due to the larger number of voters resulting from the clustering of precincts were ignored by the COMELEC.

On election day, May 10, 2010, not all BEIs used the handheld ultraviolet scanners to verify the authenticity of the ballot. Post election reports indicate that only about 50% of the hand held UV scanners were used on election day. (Note that the UV mark sensing feature had earlier been disabled since, according to testimonies by COMELEC and Smartmatic representatives during the hearings conducted by the Committee on Suffrage and Electoral Reforms (CSER) of the House of Representatives, the PCOS might reject legitimate ballots because some UV marks had lesser than planned ink densities. The lesser ink densities resulted from the high speed printing of the ballots. The COMELEC had deployed handheld ultraviolet scanners for the BEIs to use.)

Following the closing of polls on May 10, 2010, the AES Canvassing and Consolidation System (CCS) failed to distinguish between the Election Returns generated during the FTS from the Election Returns generated on election day itself.

One of the complaints raised during the hearing of the House of Representatives Committee on Suffrage and Electoral Reforms is the failure of some CCS laptops to print statements of votes.

Incident reports gathered on election day and the days following indicate that an undetermined number of election returns were conveyed manually rather than through the telecommunications infrastructure.

Some voting centers reportedly had only one modem shared by a number of clustered precincts. The same reports indicate that modem antennas easily get detached from the modem.

In all field tests and mock election activities COMELEC and Smartmatic-TIM encountered difficulties in transmitting election reports through the hierarchy – from the PCOS machine to the various canvassing levels. The transmission problems were never demonstrated to have been resolved in the days leading to the elections. Yet in the first three hours following the close of polls, transmission of reports from the PCOS machines appeared to be speedy and perfect contrary to field reports pointing to slow transmission or inability to transmit results.

Transmission of election returns started prior to the closing of polls, indicating that the CCS, Central Server, and Backup Central Servers were open and ready to receive transmissions earlier than scheduled making it vulnerable to manipulation. In fact, COMELEC, in press briefings and announcements, presented initial transmissions and election results to print and broadcast media before 6 p.m. of election day.

The Election Returns generated and printed from various PCOS machines reflected varying date and time stamps other than May 10, 2010. The date and time of the PCOS machines were not accurately set!

The number of registered voters in the CCS was wrong. The display of the number of registered voters at the Philippine International Convention Center where the COMELEC was monitoring the elections and conducting the canvass of votes for Senators and Party List showed a figure of at least



156 million. The display of the number of registered voters at the Batasan Pambansa where the Senate and House of Representatives Canvassing Panel was assembled for the canvass of votes for President and Vice President showed a figure of at least 253 million.

The digital signature as required by law is absent. In the hearing conducted by the CSER it was revealed that what was implemented was "machine digital signature", something that is not legally recognized. Further, the Forensic Team constituted by the Joint Congressional Canvassing Committee found in the PCOS audit log an entry stating "No BEI key with which to sign results" indicating that there is no digital signature affixed to the election return. Further, in the forensic examination of the PCOS machines, the Smartmatic technician could not demonstrate how the digital certificate can be extracted or displayed saying that they did not have the necessary (software) tool to do so.

The Hash Code extracted by the Forensic Team from the PCOS machines used in Antipolo is not the same as the one published in Comelec's website. The Hash Code of the software in the PCOS machine is supposed to give an assurance 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.

A Console Port is present in the PCOS machine and the internal mechanisms, including the software, are accessible by connecting another computer to it. The Forensic Team found that it could access the PCOS operating system without having to enter a username-password combination.

The National Citizens' Movement for Free Elections (Namfrel) reported discrepancies in the machine count of the ballots and hand count of the ballots done by the BEI in the Random Manual Audit (RMA) activities witnessed by its volunteers.

The COMELEC and its RMA Team reported an accuracy rating of 99.6% whereas the COMELEC had defined the accuracy requirement at 99.995%.

The foregoing give CenPEG compelling reason to want to review documents relative to the preparation of the AES done by the COMELEC and Smartmatic-TIM.

This list remains incomplete until after the Comelec allows full revelation of all information including documents relating to its preparations for the May 10, 2010 automated elections. A regime of truth must be given full respect. Care must be taken of the fact that cyberspace transactions, like the automated elections, are governed by codes designed not by democratic institutions but by profit-driven commercial companies.<sup>3</sup> It is therefore absolutely essential that the Comelec provide access to all information that govern the automated elections, especially the PCOS machines themselves as to how they processed and counted the votes at the precinct levels and transmitted them to the canvassing centers, and how the CCS received and computed the transmitted votes. The automated procedure is obviously different from the manual system because of the intangible intervention of mathematical computations that direct how ballots are to be appreciated and counted; in contrast a manual reading of votes only involves the faculty of reading which more or less is a shared experience and skill. Thus more than ever the imperative of a *free*, *orderly*, *honest*, *peaceful*, *and credible elections* simply demands full disclosure of all matters implicated in the automation process.



A bell is not a bell until it is rung.

A song is not a song until it is sung.

## **Distinctly Filipinos**

As stated above, the dictates of a *free*, *orderly*, *honest*, *peaceful*, *and credible elections* cannot just be a question of procedures and mechanisms. It is important that the people, or persons, behind them be distinctly Filipinos. The Supreme Court's ruling on Atty. Roque's petition may have rejected the idea of the automated elections being a nationalized activity. But this observation of the High Court should not stop Filipino information technology experts from seeking the lead role in future automated elections project. Queer it is that *our* government as Filipinos is founded by foreigners so much so that *we* cannot have a Government *for*, *by* and *with* Filipinos unless *we ourselves* act to found one. This is not an empty discourse. Indeed the irony is that the core expression of Filipino sovereignty, that is, *our* elections, is in the hands of foreigners. A Commissioner for the drafting of the present *Constitution* explained:

Reflecting on our Preamble, I would just like to ask whether in fact the provisions that we have drafted so far truly reflect that we are a sovereign Filipino people.

Earlier today, we heard of a position that would try to delete two provisions that we are attempting to enshrine in our Constitution. I believe that this is a very rare opportunity for this constituent body to prove that we are indeed a sovereign Filipino people. For what is sovereignty? Sovereignty is an inalienable right of an independent country. It is a prerequisite for a country to exercise its statehood without which a nation cannot be considered a State, much less an independent one. A sovereign country is one that exercises full control and governance over all its territory and over the affairs within that territory, moving toward a direction that is in fulfillment of the needs and aspirations of the vast majority of the people rather than toward a direction chartered by an alien power. A State that does not command dominion over every inch of its territory is certainly not a sovereign state.

If advertising and education are nationalized activities with more reason must elections be. It is not correct, as the Supreme Court simplistically observed, that the joint venture Smartmatic TIM acted merely as a supplier of the goods necessary for the automation project, such as but not limited to the PCOS machines, PCs, electronic transmission devices and related equipment, both hardware and software, and the technical services pertaining to their operation. Surely, beyond this, the joint venture was responsible for determining which ballots to accept or reject, which votes to count and not to count, to transmit or not to transmit, and for establishing mandates of officials to govern *us* Filipinos. As already discerned in *Information Technology Foundation of the Philippines, Inc. et al.*, what comes out of the computers depend on the joint venture's intervention. Truly Smartmatic TIM Corporation is not just providing machines, it is creating leaders. Consider for example the "null votes" that are decisive of the Vice-Presidential contest. Just as the country cannot trust its natural resources to foreigners, *we* also cannot leave the fate of *our* government to, worse, foreign corporations.

... Public officers and employees must at all times be accountable to the people...

The Commission on Elections cannot simply omit the performance of duties that are mandated by law. The *Anti-Graft and Corrupt Practices Act* decrees this to be a criminal act:

SECTION 3. Corrupt practices of public officers. — In addition to acts or omissions of public officers already penalized by existing law, the following shall constitute corrupt practices of any public officer and are hereby declared to be unlawful:



XXXX

(f) Neglecting or refusing, after due demand or request, without sufficient justification, to act within a reasonable time on any matter pending before him for the purpose of obtaining, directly or indirectly, from any person interested in the matter some pecuniary or material benefit or advantage, or for the purpose of favoring his own interest or giving undue advantage in favor of or discriminating against any other interested party.

The Anti-Red Tape Act of 2007 defines omissions of the type above-discussed as an administrative offense:

SECTION 8. Accessing Frontline Services. — The following shall be adopted by all government offices and agencies:

x x x x

- (3) The receiving officer or employee shall perform a preliminary assessment of the request so as to promote a more expeditious action on requests.
  - (b) Action of Offices
    - (1) All applications and/or requests submitted shall be acted upon by the assigned officer or employee during the period stated in the Citizen's Charter which shall not be longer than five working days in the case of simple transactions and ten (10) working days in the case of complex transactions from the date the request or application was received. Depending on the nature of the frontline services requested or the mandate of the office or agency under unusual circumstances, the maximum time prescribed above may be extended. For the extension due to the nature of frontline services or the mandate of the office or agency concerned, the period for the delivery of frontline services shall be indicated in the Citizen's Charter. The office or agency concerned shall notify the requesting party in writing of the reason for the extension and the final date of release for the extension and the final date of release of the frontline service/s requested.
    - (2) No application or request shall be returned to the client without appropriate action. In case an application or request is disapproved, the officer or employee who rendered the decision shall send a formal notice to the client within five working days from the receipt of the request and/or application, stating therein the reason for the disapproval including a list of specific requirements which the client failed to submit.
  - (c) Denial of Request for Access to Government Service Any denial of request for access to government service shall be fully explained in writing, stating the name of the person making the denial and the grounds upon which such denial is based. Any denial of request is deemed to have been made with the permission or clearance from the highest authority having jurisdiction over the government office or agency concerned.

So does the *Government Procurement Act*:

SECTION 3. Governing Principles on Government Procurement. — All procurement of the national government, its departments, bureaus, offices and agencies, including state universities and colleges, government-owned and/or -controlled corporations, government financial institutions and local government units, shall, in all cases, be governed by these principles:



(a) Transparency in the procurement process and in the implementation of procurement contracts.

The Code of Conduct and Ethical Standards for Public Officials and Employees requires public officers to observe the norms of commitment to public interest, professionalism, justness and sincerity, political neutrality, responsiveness to the public, nationalism and patriotism, commitment to democracy and public accountability, and simple living. Failure to comply with these norms is a both a criminal and administrative offense under Section 11 thereof.

People from the Smartmatic-TIM cannot relieve themselves of accountability for the many defects in the automated elections system. Regardless of whether these defects ultimately render the elections and its results unreliable or untrustworthy, but worst if they do, Smartmatic-TIM failed to deliver on what it had promised to the people so that compensation or remuneration ought to be forthcoming to the damaged parties. For how else could the Government compel a contracting party to take its undertakings seriously if no punishment of any sort is exacted on the erring personalities? People's money was spent on this project, hence, it is only fair that that the greatest accountability be demanded from those who benefitted from it. The precise degree of culpability would of course be determined only after a thorough investigation of the relevant documents and systems proceeds unhampered. It is for this reason that transparency and openness are of utmost significance in assessing the automation mechanisms.

... 'I am saving you from drowning.'

## Standards of meaningful election

The standards for every meaningful election have been the conduct of *free, orderly, honest, peaceful, and credible elections*. Implicit in them is the utmost respect given to a voter's privacy right, *i.e.*, secrecy in voting, as well as the fulfillment of the expectation to count his or her vote, *i.e.*, public counting. The Comelec's rhetoric to *trust-in-the-machine* above all else will certainly not bring about the realization of these standards. Only a full disclosure of the details of the automated elections would.

But not only that. Since elections are a sovereign act, it behoves that the holding of elections be under the auspices of Filipino information technology experts. For if the rule were otherwise, that is, if aliens were to be given the administration and ownership of this supremely sovereign act, the nation runs the real risk of surrendering it without adequate recourse. For a foreign entity can easily flee the jurisdiction of the government and conflict of laws devices may prevent full accountability from taking place. Hence, more than when aliens run the elections, a Filipino-initiated automated elections project is better suited to effect complete access to and revelation of the mechanisms involved in automating the elections – stated simply public accountability is better served in Filipinizing, as it should be, the elections in this country.

There have been observations of fraud in the conduct of the May 10, 2010 automated elections. Unfortunately the ascertainment of the root cause thereof, including their impact of the electoral process itself, would be impossible to accomplish without the Comelec lending disclosure of all information that pertains to the automated system. For some reasons known only to the Comelec, however, perhaps for the sake of expediency and convenience, given the hasty and rushed environment under which the May 10, 2010 elections were to be held, the latter refused to entertain questions and restricted the search for answers thereto. After several Supreme Court decisions upholding the right of the public unhampered access to Comelec's relevant files, the investigation on the truthfulness of the fraud allegations should now proceed immediately. To dilly-dally even more would endanger the reliability of the results that may emanate therefrom. Clearly the public, especially its information technology experts, needs no saving from their inquisitive selves. We need saving from those who would want to save us without telling us why. EU-CenPEG Project 3030



## **End Notes**

- 1 CONST, Art. IX, Sec. 2 (4).
- 2 The facts were copied from Roque Jr. et al. v. Commission on Elections et al., G.R. No. 188456, September 10, 2009.
- 3 See R.H.C. Balisacan, CLAIMING PERSONAL SPACE INA GLOBALIZED WORLD: CONTEXTUAL AND PARADIGM SHIFTS IN THE DELIMITATION OF THE RIGHT TO PRIVACY, 82 PHIL. L.J. 67 (2008) citing L. Lessig, CODE AND OTHER LAWS IN CYBERSPACE (1999).