A Case Study

BILIRAN PROVINCE:
PROBING INTO A POSSIBLE AUTOMATED CHEATING

How are fraud allegations proven in an automated system of voting? What are the evidences that can be used to substantiate such claims? In manual elections, it was easier to catch a person cheating or notice an intent to cheat. But in the automated elections, where the counting and canvassing of votes are mostly hidden from plain view, the burden of proof is on the complainant, and unearthing evidence has proven to be much more challenging.

BILIRAN - May 12, 2010 was one for the history books of young Biliran: It was when the very first rally was held in the Philippines' smallest province. On that day, 4,000 people in a province of around 150,000 residents took to the streets of the capital, Naval, and gathered in the provincial capitol to air their indignation over what they consider as a grave injustice. What could have possibly provoked this somewhat uncharacteristic and spontaneous display of collective outrage? Prior to this was the May 10, 2010 automated elections.

Election day in Biliran was not without hitches, as will be discussed in more detail in the latter part of this paper. But despite the problems on May 10, in the following day, the proclamation of winning candidates by the Provincial Board of Canvassers (PBOC) pushed through, including that of Rogelio Espina, the former governor and winning congressman. The PBOC was led by interim Comelec Provincial Supervisor Atty. Alvin Richard N. Japson[1]. On May 12, 4,000 Biliranons and supporters of losing congressional candidate and former congressman Glenn Chong, most of whom have never joined a demonstration before in their life, gathered in the provincial capitol and demanded for a manual recount of votes[2]. They allege that the election outcome was rigged in favor of the Espinas, an influential political dynasty who has been holding power in the province for over 12 years [3]. Rogelio Espina won over Glenn Chong by a 361-vote margin.

From May 12 until today, an assembly of residents has been holding regular prayer vigils in front of the capitol. At the same time, for days other protesters from various municipalities were holed up outside the Municipal Treasurer's Offices to secure the official ballots if their request for a manual recount will be granted. Meanwhile, back in the capitol, the protesters frisked exiting visitors and employees to make sure that no CF cards and other crucial election documents were taken out unauthorized. An employee reportedly lost her money in the body search[4]. One Espina sympathizer has branded the gathering as a "violent mob"[5].

Entering into the fourth month since the elections but there are no signs of accusations letting up. Add to these is a series of election-related incidents, such as the interception of the delivery of extra PCOS machines allegedly used to manipulate the election results, which only heightened people's suspicions. There were insinuations that Attorney Japson colluded with the Espinas to commit electoral fraud, about the discovery of transmission logs with data that do not match, biased Board of Election Inspectors (BEIs), sourgraping by losing candidates, massive vote buying, and so on. All of Biliran, it seems, has taken sides. The public discourse has become a veritable sea of conflicting testimonies and accounts, the veracity of each dependent on whose side the person is for.

But what exactly happened in Biliran last May 10, 2010?

Case Study Methodology

For Project 3030 Research to gain a deeper understanding of the political tension currently rocking the province, a case study was undertaken in Biliran. The research team embarked on a four-day field research from June 17 to June 20, 2010 in Biliran in our quest to gain a whole picture of the election day experience in the island-province. Assisted by a regional coordinator and local contacts, we collected election data, including copies of election returns, audit logs, and other documents. We also gathered pertinent information and drew insights from interviews with the local Parish Pastoral Council for Responsible Voting (PPCRV) poll watchers, Board of Election Inspectors (BEIs), a Smartmatic technician, local politicians, a regional Comelec personnel, and voters. A large bulk of electoral protest documents was also shared with the research team by Atty. Glenn Chong, who has filed an electoral protest in the House of Representatives Electoral Tribunal (HRET) and Comelec and is pushing for a manual recount of ballots. Unfortunately, the research team was unable to interview Rep. Rogelio Espina. He is said to be busy with the ongoing House of Representatives budget hearings. Interview request letters left at the Kawayan municipal office for Mayor Gerry Espina were likewise not answered.

The data analysis reports for the municipalities of Almeria and Kawayan and a draft report on Culaba written by Ferdinand Morillo, an electronics and communications engineer, were also heavily referred to in this case study. Mr. Morillo, who was hired by Almeria mayoralty candidate, Dra. Lorna Nierra, and Kawayan mayoralty candidate, Caridad Ang, to analyze various Comelec-certified documents, conducted a meticulous job of comparing each log produced by the machine with the notes of the BEIs and Board of Canvassers (BOCs). A Biliran blog, biliranisland.com, where local observers post their own analysis of the elections, was also a treasure throve of links and information that provided updates on the current political climate in the province.

Table 1. Data Collection Methods and Data Sources

Methods	Respondents/participants
Focus Group Discussions (FGD)	Selected voters Selected poll watchers
Key Informant Interviews (KII)	Regional Comelec personnel Former Congressman Glenn Chong BEI member Selected poll watchers and voters Local politicians Smartmatic Technician
Examination of records, documents	Canvassing print logs, PCOS audit logs, election returns, Provincial and municipal Board of Canvasser's Minutes of Proceedings, PCOS technician's manual, CCS operator's manual, poll watchers' checklists, Chong's electoral protest evidence including witnesses' affidavits, Ferdinand Morillo's reports, Comelec resolutions, RA 9369, Terms of Reference/Request for Proposals for the 2010 elections, local news articles, photos

Study Objectives

The scope of this case study included fraud allegations as well as other election-related activities from pre-election, election day, and post election. This includes, among others, the deliveries of PCOS machines and ballots, BEI trainings, voter education, problems encountered on election day, and the retrieval of the machines after the elections.

The specific objectives of the field research were:

1. To validate election day incident reports submitted to the Project 3030 monitoring site;
2. To form a holistic picture of the experience of the province of the first ever automated elections;
3. To investigate the allegations of electoral fraud in the province;
4. For the case study to serve as a reference in drafting recommendations for the improvement of the next elections.

Profile of Biliran Province

Geography

Biliran Islands is a 207-square-mile stretch made up of two main islands, one where its capital, Naval, is located, and the other, the island-municipality of Maripipi. The province is directly connected to Leyte province by an inter-island bridge over Biliran Strait and can be reached via a two-hour land travel from Tacloban City, Leyte's provincial capital. It is characterized by mountainous interiors and coastal areas.

Biliran, at different points in its history, belonged to its neighboring provinces. Some areas were once part of Cebu and other parts of Samar and Leyte at a time when the latter two were not yet separate provinces. It was established as a separate province on May 11, 1992. People speak Cebuano in the areas in the west, also nearest to Cebu, while Waray-speaking Biliranons reside in the eastern portion.[6]

Presently, the province is divided into eight municipalities and 132 barangays.

Table 2. List of Municipalities

MUNICIPALITY	TOTAL POPULATION
Almeria	14, 420
Biliran	14,947
Cabucgayan	18,799
Caibiran	20,616
Culaba	10,962
Kawayan	19,053
Maripipi	6,946
Naval	44,288

Source: Biliran Province: Population as per 01 August 2007,
National Census and Statistics Office (NCSO)

It has one congressional district - earning the province a one-seat representation in the lower House of Representatives, which is also one of the most sought-after positions in the last elections. The 2007 National Statistics Office Census recorded a total population in the province at 150,031.[7]

Economy

Biliran used to belong to the top ten poorest provinces in 2003, based on the National Statistical Coordination Board (NSCB) statistics[8], this despite its comparative richness in natural resources. Like in most island-provinces in the country, people in Biliran get by primarily through fishing. Aside from seawater fishing, many had also gone into fishcage culture and built shrimps, milkfish and prawns fishponds. Agricultural crops are mostly *palay* in the lowland areas and vegetables in the highlands. Many are also into copra and coconut oil production.[9]

Other Industries

Geothermal Energy

Lately, a largely untapped resource in the island, geothermal energy, has generated a lot of interest. An exploration and drilling for geothermal energy by Biliran Geothermal Inc. (BGI) began last 2008. BGI, a joint venture company composed of Filtech Energy Drilling Corp. and Envent Holding Philippines, Inc., has a big investment in this project. It has allocated $1 million for surface exploration, $15 million for drilling, and $150-450 million for the geothermal plant for its initial spending alone[10].

Envent is a big geothermal developer with Icelandic investors that considers the Biliran Island project as its most advanced project to date. Its first unit, Biliran Unit 1, is expected to be online by 2012 with a 50-megawatt capacity. Just this year, it signed more than $350 million worth of power purchase agreements (PPAs) only for the Biliran Geothermal Project[11].

Mining

Mining is also a booming industry in the province. Sulfur, which is most abundant in the towns of Caibiran and Naval, proves to be highly profitable. Sulfur is commercially used in fertilizers, black gunpowder, matches, insecticides and fungicides[12]. The sulfur mining industry was expected to bring in huge revenues for the province. However, there is an existing strong opposition, led by the Diocese of Naval, against mining because of its negative impact on the environment. Sulfur extraction, for one, was blamed by the diocese for the flash foods in the towns of Caibiran and Cabucgayan during the heavy rains of Typhoon Feria in 2009.

Politics

For several years now, there has been a brewing political rivalry threatening to explode between the Espinas and Chongs. Four years ago, lawyer Glenn Chong helped in filing a graft and corruption case in the Ombudsman-Visayas against the Espinas. The suit was initiated by the Biliran Advocates for Good Governance and Transparency (BAGGAT), an organization deputized by the Ombudsman. The corruption charges included an alleged "ghost" hospital worth Php 21 million and overpricing of unused hospital equipment[13].

The Espinas are among the 10 political clans in the country with at least four family members winning in the last elections. They also belong to a list of families who have been dominating local politics for more than 10 years. With their recent victory in the elections, their cumulative years in power would now add up to 18 years, from 1995 to 2013[14]. The Chongs, on the other hand, a family in the construction business and also owns the biggest grocery store in the province, are political neophytes compared to the Espinas. Glenn Chong, a CPA-lawyer, disclosed that the assassination of ex-Governor Atty. Danilo Parilla on September of 2006 was a turning point that pushed him into politics and to eventually run for congressman in 2007[15]. Parilla was shot dead in Cebu City purportedly by a certain Eugenio Corpin, a former Espina bodyguard. The Espinas have denied any involvement in the murder[16]. Political observers say that it was Parilla's murder that sparked an anti-Espina movement, of which Chong was a leader.

Chong won the congressional race in the bitterly-fought 2007 elections, defeating former Representative Gerardo "Gerry" Espina Sr., the clan patriarch who had held the seat from 1995 to 2004[17]. Espinas' three children, on the other hand, were re-elected in various local government posts[18]. On June 7, 2008, Charlie Chong, Atty. Glenn Chong's father, survived an ambush attempt unscathed. But the ambush left his two bodyguards dead. The Chongs accused their closest political rival of masterminding the attack, but Gerardo Espina Sr., in his counter-affidavit, maintained his innocence[19]. Espina had filed a libel case against Chong. The case is still ongoing.

The Automation of Elections in Biliran Province

The 2010 elections was a critical juncture in the history not only of the country because of the first ever automation of the elections, but more so for the province. This was the definitive test of a new system of voting set against a volatile political landscape. For the candidates, the elections also served as a platform to try to outdo their strongest political opponents and for them to be given a chance to realize their own visions for the province. For the Espinas, particularly Rogelio Espina, a medical doctor by profession, it was the opportunity to regain the congressional seat once held by his father and younger brother[20], and based on his public pronouncements, to continue to implement his programs on agriculture and tourism, among others. For Glenn Chong, it is to carry on with the implementation of his priority projects in the province, including the operationalization of mobile clinics, provision of free uniform and school rides for students, and concreting of unpaved roads, which earned him the moniker Representative "Kalsada"[21].

The region was a bailiwick of the Arroyo administration party, Lakas-CMD-Kampi. Both Chongs ran under the administration ticket. Espina was a former provincial chairman of the Lakas-CMD-Kampi party, but he defected to the Nacionalista Party last year.

The 2010 automated election system (AES) had three distinctive components: (1) the election management system (EMS) is a software platform used to define and organize elections. Its functions were basically based on pre-voting activities such as designing of ballots[22], (2) the precinct count optical scan (PCOS) machine scanned and read the paper ballots in the precincts, and (3) the consolidation canvassing system (CCS), a program installed in a laptop used in all canvassing levels[23] that consolidated the results. Contrary to popular assumption, the automated elections still featured manual voting with the use of paper ballots shaded by the voters. The computerized aspects were the counting of votes by the PCOS machine and canvassing of results.

Project of Precincts

Table 3. Biliran Province Project of Precincts

Municipality	No. of Brgys.	No. of Voting Centers	No. of Clustered Precincts	No. of Registered Voters
1. Almeria	13	13	14	9,797
2. Biliran	11	11	16	10,095
3. Cabucgayan	13	13	19	12,344
4. Caibiran	17	15	22	13,164
5. Culaba	17	12	18	7,894
6. Kawayan	20	19	23	12,828
7. Maripipi	15	13	15	4,826
8. Naval	26	24	39	27,603
TOTAL	**132**	**120**	**166**	**98,551**

Source: Project of Precincts for the 2010 Synchronized National and Local Elections, Commission on Elections

For the 2010 elections, the seven precincts in previous manual elections were clustered to form one precinct with a maximum of 1,000 assigned voters[24]. The province had a total of 166 clustered precincts located in 120 voting centers or schools. Last May 10, 98,551 registered Biliranons were expected to troop to these precincts, but only 82,127 were able to vote, resulting in a voter turnout of 83 percent[25], significantly higher than the 75% average turnout nationwide[26]. There were 166 PCOS machines designated for Biliran, one machine per precinct, plus 11 contingency machines for occasions that needed PCOS machine replacement.

PRE-ELECTION PREPARATIONS

The following are among the preparations needed for the first ever automated national and local elections in the country: extensive and comprehensive voters' education; proper training of BEIs and poll workers on protocols and contingency measures; on-schedule deliveries and storage of machines, ballots and other election paraphernalia; and the final testing and sealing of the PCOS machines three to seven days before election day[27].

Comelec's Voters' Education

According to a regional Comelec personnel, the voter education of the Comelec in Region VIII started on the latter part of last year, but the ball only went rolling for a PCOS machine road show on January 1, four months to election day. One PCOS machine and three sample ballots were used for the demos which were held in colleges and universities, government offices, provinces, city jails, and public forums. The voter education for indigenous peoples was done in coordination with the International Foundation for Electoral Systems (IFES) and the Commission on Human Rights (CHR). The Comelec-accredited PPCRV in the province was not able to conduct its own voter education for lack of time.

Topics in the COMELEC-initiated voter education included an overview of the salient features of the PCOS machine. It also covered people's exercise of the right to suffrage. A PCOS demonstration was usually held afterwards, with the local audience invited to try voting using the machine by shading the ballots and feeding them into the machine.

The Comelec admitted to struggling with the voter education on the first leg due in large part to insufficient funds to the extent that the regional Comelec personnel had to shell out initial logistics expenses, which were later reimbursed. The rest of the PCOS machines for the road show also arrived only in March. This aggravated the already delayed schedule and insufficient coverage of the voter education in the region. In Biliran, with the late delivery of machines for the demo, some voter education's centerpiece had to make do with the film showing of the three-minute Sex Bomb "*Bilog na Hugis Itlog*" video, an instructional video on how to properly shade the ballots and the number of allowable votes per electoral position. Voter education was also used for campaigning in at least one reported incident. A complaint reached the local PPCRV of electioneering by a politician who made use of the latter part of a Comelec voter education program to present his achievements for the province.

Analysis

The Comelec's voter education was not voter education per se but merely voter information. Since the Comelec is in a position of authority and is the manager of the elections, it can have considerable influence in the formation of perceptions and decision making in the choice of candidates among the voters, especially on what voters need to know about and expect from the elections. With the limited information shared by the Comelec with the voters through its "education" campaign, the message that comes across is that the only role of the voter is to go to the precinct, shade and feed the ballots, and report incidents of old-style fraud such as vote buying. But a voter's role is not only that, especially if the goal is for the elections to be a truly participatory and empowering political exercise.

Among the voters' rights and responsibilities, at the very least, is to understand how the system works. In the past elections, the voters knew the manual election procedures very well. The same goes for the automated elections. The voters should also have enough knowledge on how the automated election will work so that they can help monitor and safeguard the elections to ensure that the system is secure and the election outcome is credible. To be able to do this, there is a need to arm the voters with sufficient knowledge on how it will work, including the technical aspects, the vulnerable spots, and contingency measures. The goal is to capacitate the voters for them to know, for example that when the PCOS machine suddenly stopped working on election day, only the BEIs and Smartmatic technician are allowed to go near the machine. Or that the word "congratulations" that appears on the PCOS LCD screen after the voter had fed the ballot doesn't automatically signify that the votes had been counted. Equipping the voters with knowledge does not only

enable them to cast their votes properly but it can also enhance the potential for a vigilant citizenry that demands, among others, for an electoral exercise that is clean, accurate, secure, and credible.

Training of Poll Workers

All trainings of BEIs nationwide were conducted last March, but not all were made to attend. Only the chairman and poll worker were required to undergo the 2-day training. The third member attended a one-day refresher seminar held in April. The training venue for Biliran's BEIs was in Villa Hotel in Ormoc City, Leyte on March 20 to 21, 2010. The crash course included a review of the General Instructions for BEIs and pertinent Comelec resolutions, a PCOS demo and written and practical exams. Representatives from the regional Department of Science and Technology (DOST) served as the certification body. A BEI interviewed said that he was satisfied with the training he received.

The training of technicians, who were directly hired by Smartmatic, meanwhile, was conducted in an IT room inside the Naval State University campus. Those first hired were mostly Information and Communications Technology (ICT) students. However, some backed out from serving as technicians for unspecified reasons. They were replaced by reserve technicians, who are mostly out of school youth. The technicians were originally promised compensation of Php 340 per day for 15 days of service, but this was eventually reduced to Php 250 per day, for 15 days, including training. They were told that their compensation was deducted to pay for the SIM card and Php 500 load that they will be using for the elections. But according to the Smartmatic technician interviewed, instead of Php 500 worth of cell phone load, they only received Php 300 last May 10.

The Smartmatic technician said that PCOS troubleshooting was not included in their training. They were only provided with a manual right before the Final Testing and Sealing of PCOS machines, which they had to self-study. When asked if he thinks the training was sufficient for him to be able to perform his election tasks, the technician replied, *"I cannot say adequate because we should know all that could possibly happen. And as I said, if the PCOS broke down, we didn't know what to do. And everybody was pointing at us, that we should know how to fix it."* (*"Hindi ko masasabing sapat kasi dapat alam naming yung lahat-lahat ng mangyayari. Yun nga, kapag nasira, hindi namin alam. Kami din yung tinuturo na dapat alam niyo yan"*).

Storage and Deliveries

The storage and deliveries of the PCOS machines and ballot boxes were subcontracted by Smartmatic to three different logistics firms. For both Visayas and Mindanao, Argo International Forwarders, the same company that deployed the machines for the 2008 Autonomous Region for Muslim Mindanao (ARMM) elections, was tasked to transport the machines and provide for their hubs and sub-hubs. All delivery routes began from the Smartmatic main warehouse in Cabuyao, Laguna where the PCOS machines were picked up and brought to the regional hubs. In the case of Eastern Visayas, the center of logistics operations was located in the regional hub, the Citi Hardware warehouse, in the outskirts of Tacloban City in Leyte. Unlike in other regions, the location of the tightly-guarded regional hub was disclosed by regional Comelec to the general public. The PCOS machines were picked up from this warehouse and brought to the provincial hubs and, three to seven days before elections, to the precincts in time for the Final Testing and Sealing (FTS) of PCOS machines. There were no significant reports of security issues or lapses during the storage and delivery prior to election day.

The delivery of ballots nationwide was the exclusive responsibility of Air21, among the largest in the logistics industry. The company was also hired, last minute, to bring all CF cards for reconfiguration to Smartmatic's warehouse in Laguna after the May 3 CF card incident[28] and redeploy these to the provinces.

Challenges

Part of the security measures during storage and deliveries, aside from detailing Philippine National Police escorts, was inviting the local PPCRV, the Comelec-accredited election watch group, to keep an eye on the machines. However, they were not able to do this. Local PPCRV poll watchers said that there was some confusion over the delivery schedules after the May 3 CF card incident.

Immediately after the May 3 incident, all CF cards nationwide, totalling 76,347, were ordered recalled, reconfigured either in Smartmatic's warehouse in Laguna or in the provincial DOST offices, and then delivered to their respective precincts. The CF cards for Biliran were presumably reconfigured in the provincial DOST office inside the Naval State University compound. The local PPCRV said that they were not informed of the new schedules following the CF cards recall and as a result failed to anticipate the arrival of the machines and ballot boxes in the precincts. The same thing happened with the arrival of the ballots and election paraphernalia in the Municipal Treasurer's Office, where they were stored for safekeeping.

Although most poll watchers are veterans in poll watching, the automation of the elections required a lot of re-strategizing in monitoring. The integrity of the automated election results is only as good as the machines that read and counted the votes and the ballots used by the voters to register their choice as they intended. So if the storage of the machines was unsecured, this creates doubts in the minds of the people whether they were tampered with to commit cheating or were used in transmitting spurious results. And if the machines kept on shutting down during testing, people begin to question the quality of the machines and the soundness of the installed programs.

Such are the reasons why a huge proportion of the automated elections monitoring before election day had to focus on the participation of poll watchers in testing and keeping an eye on the machines and ballots even before these reach the voting centers. The apparent miscommunication and lack of coordination between the local PPCRV and provincial Comelec and possible lack of transparency on the part of Comelec, however, prevented the poll watchers from fulfilling their mandate. The local PPCRV had to content themselves with poll watching in the precincts only on election day itself.

Final Testing and Sealing (FTS) of PCOS Machines

The plan for the final testing and sealing procedures should include mock voting participated in by 10 mock voters who will fill out 10 testing ballots. These are then fed into the machine and results are generated. The ballots will be later tallied manually and compared with the PCOS-generated election results. There were no significant discrepancies found in the province during the FTS.

FTS is required under the Terms of Reference for the AES bidding last year to conduct testing three to seven days before election day[29], but this was adjusted on the heels of the CF card incident. The May 3 CF card incident created a domino effect that included postponement of FTS to May 8 and 9. However, there was at least one precinct in the province, in Brgy. Balacson, Kawayan, that conducted another FTS in the wee hours of the morning of May 11 (See Box 1). Its first Final Testing and Sealing on May 8 showed that the CF cards were still not working properly.

ELECTION DAY EXPERIENCE

The following is a presentation of recorded election-day incidents gathered during the field research. This also includes evidences collected and compiled by Atty. Glenn Chong and his supporters and the local PPCRV that provide some data about the elections on the ground.

Voters' List Irregularities

There were allegations that the BEIs in a barangay in Caibiran had falsified Comelec documents, particularly the Election Day Computerized Voters List (EDCVL) and the Voters' Registration Record (VRR). Chong's camp alleged that the BEIs made it appear that 10 registered voters voted on election day in the barangay, whereas according to the affidavits of the relatives and friends of these "ghost" voters, one of them died last year, while the others are working either in Manila or abroad and were therefore unable to vote in last May's elections. Criminal and administrative cases have been filed against the BEIs by Charles Chong, Atty. Glenn Chong's father, who also ran for governor and lost

Irregularities in Election Procedures

Among the irregularities documented on election day happened during the extension of voting hours. In Brgy. Iyusan, Almeria, a certain barangay chairman wearing the campaign shirt of a candidate, was alleged to be giving orders on which voter shall be prioritized in the voters' queue during the extension. In another municipality, the mayor was seen inside the voting premises at around 2 a.m. of May 11. The government official was observed talking to the BEI.

Sec. 3 of Comelec Resolution 8758 or the *Rules and Regulations Implementing Republic Act No. 9006* or the "Fair Election Practices Act" prohibits a voter or candidate to campaign on election day[30]. Furthermore, Sec. 29.d of Comelec Resolution 8786 or the Revised General Instructions for Board of Election Inspectors states that "*unless specifically authorized by the Commission (Comelec),*" it is unlawful for any barangay official, whether elected or appointed, "*to enter any polling place or stay within the fifty meters*" parameter. The incidents cited above are blatant violations of these protocols.

Meanwhile, in Brgy. Looc, Cabucgayan, some voters were allowed by the BEIs to be assisted during voting even though they were not disabled or illiterate. If a voter is accompanied by another person without any reasonable justification, the secrecy of votes will be endangered. It is also possible for the other person, with ill intent, to influence the voter and for the voter's votes to not have been freely cast. Another election protocol violation occurred in Brgy. Balaquid, Cabucgayan where a BEI chairman provided two voters with replacement ballots after their ballots were rejected several times. Only one ballot should be given per voter. In Brgy. Viga, Maripipi, poll watchers reported that the BEI chairman fed the ballots into the PCOS machine.

Extension of Polls until May 11, 2010

Some precincts in the province extended the voting until May 11, 2010 for various reasons. Below are those barangays documented by Chong's supporters and by the PPCRV poll watchers.

Table 4. List of Brangays that Closed Polls on May 11, 2010

Municipality	Barangay	Time Polls Closed	Ballots Cast	Other Observations
Almeria	Brgy. Iyusan	9:20 a.m.	660	
Cabucgayan	Brgy. Balaquid	12:08 p.m.	591	
Cabucgayan	Brgy. Lo-oc	5:23 a.m.	541	audit log showed 223 ambiguous marks detected, 118 overvotes, detected and 55 invalid ballots detected
Caibiran	Brgy. Bariis	5:41 a.m.	596	unofficial/plain thermal paper used for election returns (ER) for local positions instead of thermal papers w/ COMELEC seal
Caibiran	Brgy. Cabibihan	6:14 a.m.	692	
Caibiran	Brgy. Villa Vicenta	2:50 a.m.	359	unofficial/plain thermal paper used for election returns (ER) for local positions
Kawayan	Brgy. Balacson	8:14 a.m.	510	

Source: Atty. Glenn Chong electoral protest documents

In Morillo's reports, "*Data Analysis Report for the Municipality of Kawayan, Biliran Province*" and "*Data Analysis Report for the Municipality of Almeria, Biliran Province*" with the PCOS audit logs as the main reference, four barangays each for Kawayan and Almeria closed the polls on May 11, 2010, one day after election day. These precincts and barangays are the following:

Table 5. List of Barangays in Kawayan and Almeria that Closed Polls on May 11, 2010

MUNICIPALITY	BARANGAY	DATE AND TIME POLLS CLOSED	Transmission from PCOS Machine
Kawayan	Balacson	May 11, 2010, 8:19:54 a.m.	Successful transmission
	Balite	May 11, 2010, 1:23:03 a.m.	No transmission
	Poblacion	May 11, 2010, 03:46:10 a.m.	No transmission
	San Lorenzo	May 11, 2010, 1:19:14 a.m.	No transmission
Almeria	Caucab	May 11, 2010, 1:03:44 a.m.	2:18:11 a.m.
	Jamorawon	May 11, 2010, 12:35:08 a.m.	3:19:49 a.m.
	Iyusan	May 11, 2010, 6:57:39 a.m.	8:21:10 a.m.
	Talahid	May 11, 2010, 12:36:06 a.m.	No transmission

To shed light on the possible reasons for the extension of the voting, we provided a narration of events that took place in Brgy. Balacson, Kawayan, where voting closed on May 11 at 8:19 a.m. All timestamps are based on the PCOS audit log, interviews with the BEI chairman and the local PPCRV poll watcher assigned to this particular precinct.

Box 1

The 26-Hour Automated Elections
Elections in Precinct 7806003, Balacson Elementary School
Municipality of Kawayan

One of the clustered precincts that extended until May 11, 2010 is found in the coastal village of Balacson, a few minutes' ride from the town proper of Kawayan, a fifth class municipality. It has one voting center, the Balacson Elementary School, which in previous elections was made up of four precincts. These were clustered into one precinct that was supposed to accommodate 597 registered voters for the May elections. Balacson or Kawayan, for that matter, can be considered a microcosm of Biliran in terms of its politics. It is in this municipality where the Espinas built their political dynasty 15 years ago and have held considerable power since.

Elections in Precinct 7806003

It was already 7 a.m. of May 10, and what started as a string of early voters outside the precinct has now turned into a long queue. The PCOS machine and election paraphernalia had already been inspected and assembled by the Board of Election Inspectors (BEIs). The only thing missing was the CF card. We received reports on election day of delayed deliveries, Precinct 7806003 among them.

Voting Without a CF Card

By 7:30 a.m., to avoid further delays, voting proceeded in the precinct even without a CF card. But instead of feeding the ballots in the PCOS machine, the voters were told to put them in the ballot boxes. The PCOS machine remained on standby in one corner of the room. This continued until 11 p.m.

Comelec Resolution 8786 or the *Revised General Instructions for the Board of Election Inspectors (BEIs)* requires all polls nationwide to be opened at 7 in the morning and closed at 6 in the evening. This was later extended by the national Comelec from 6 p.m. to 7 p.m. on election day, following reports on the ground of long queues of voters. Extension beyond 7 p.m. will only be allowed if there is still a queue of voters. In which case, all voters within 30 meters can still cast their votes. Comelec Resolution No. 8786 states that:

"If at six o'clock there are still voters within thirty (30) meters in front of the polling place who have not yet cast their votes, voting shall continue but only to allow said voters to cast their votes without interruption. The poll clerk shall, without delay, prepare a complete list containing the names of said voters consecutively numbered. The voters listed shall be called to vote by the poll clerk by announcing each name three (3) times in the order in which they are listed. Any voter in the list who is not present when called shall not be allowed to vote at any later time. The said list shall be submitted to the Election Officer."

Supporters of Chong and Ang accuse the BEI chairman of allowing a barangay tanod, whom they alleged was an Espina supporter, to traffic the voters in the precinct during the extension. This was vehemently denied by the BEI chairman, saying that he followed Comelec instructions to the letter. Gerry Espina won over Ang in this precinct by a mere 41 votes and Rogelio Espina over Chong by 125 votes.

Final Testing and Sealing

When the CF card finally arrived at around 1 a.m. of May 11, many voters had already gone home. There was no line of voters outside, and there were only the three BEIs and a handful of watchers, including one from the local PPCRV, remaining. With the CF card finally on hand, a Final Testing and Sealing of the PCOS machine was conducted. For this precinct, the FTS only took 20 minutes, 1:30 a.m. to 1:50 a.m., from the shading of ballots of 10 mock voters to the closing of polls. But the whole process, including manual counting of votes for comparison with the PCOS election returns ended at 3:24 a.m.

Feeding of Ballots in the PCOS Machine

Since the electronic and manual results matched and there were no significant technical problems during testing, the feeding of official ballots into the machine proceeded. The PCOS machine was reopened and initialized, and the ballots were fed one by one by the BEI chairman and poll clerk. All 510 ballots took approximately four hours to feed, from 4:09 a.m. to 8:19 a.m.

The act of personally feeding the ballots into the machine by the voter is one of the steps in the voting process that is supposed to demonstrate that the system is transparent and that the secrecy of the ballot is ensured. But this is obviously not true in this precinct.

Closing of Polls

After all the ballots had been fed, an official closing of polls was performed by the BEIs on the PCOS machine at 8:19 a.m. In total, 510 ballots were cast and 18 were rejected. After the printing of the first eight sets of election returns (ERs), the BEIs were supposed to digitally sign the results. The digital signature essentially protects the data, in this case data from the election returns, from tampering. It is one of the security layers in the AES to ensure data authenticity. Only digitally-signed results are considered official election results and will be the basis for canvassing and proclamation as stipulated by RA 9369[31]. However, the revised instructions for the BEIs in Comelec Resolution 8786 that was promulgated on March 4, 2010 removed the act of digital signing.

f) *Thereafter, the PCOS shall automatically count the votes and immediately display a message "WOULD YOU LIKE TO DIGITALLY SIGN THE TRANSMISSION FILES WITH A BEI SIGNATURE KEY?", with a "YES" or "NO" option;*

g) *Press "NO" option. The PCOS will display "ARE YOU SURE YOU DO NOT WANT TO APPLY A DIGITAL SIGNATURE?" with a "YES" and "NO" option;*

h) *Press "YES" option. A message shall be displayed "PRINTING 8 COPIES OF NATIONAL RETURNS. PLEASE WAIT";*

Sec. 40 Comelec Resolution 8786, promulgated March 4, 2010

And in this precinct, as in all precincts nationwide, the BEI chairman followed the revised Comelec instructions, which technically should have made the results unofficial.

During the post-election House of Representatives Committee on Suffrage and Electoral Reform hearings[32], the Comelec and Smartmatic clarified that the results had digital signatures that were generated by the machine. But Lito Averia, Project 3030 IT consultant, points out that a machine signature does not exist in the legal or technical firmament. Furthermore, it is the tradition in previous elections, as laid down by BP 881 or the Omnibus Election Code, that the BEIs sign the official ERs. (See Lito Averia's report on Digital Signatures)

Transmission of Results

After printing, the modem was connected to the PCOS for the transmission of results to various servers. There were no setbacks this time and the results were successfully transmitted at 9:44 a.m. of May 11 to all three servers – the municipal canvassing server, the Comelec Central server, and the Pope Pius server, where the KBP, PPCRV and the dominant majority and minority parties get their results. Despite the fact that the transmission was executed late, the precinct was the very first in the municipality to successfully transmit its results to all three servers.

After transmission, the audit, transmission and statistical logs were printed. A backup copy was also created and elections in Precinct 7806003, Balacson Elementary School, Brgy. Balacson, Kawayan, were officially closed at around 12 p.m. of May 11. The supposed 12 to 14-hour election finally ended after about 26 hours.

PCOS Problems

In some other precincts, among the reasons cited for the extension of voting was the repeated malfunctioning of the PCOS machines. A technical problem was reported in Brgy. Balaquid, Cabucgayan where the PCOS machine malfunctioned at 5.02 a.m. until around 7 a.m. of May 11. The PCOS machine also kept on rejecting ballots. This was eventually replaced with a contingency PCOS machine by a Smartmatic technician. In Brgy. Julita in the municipality of Biliran, the word "congratulations" did not appear after every feeding of ballots in the PCOS machine. The voters therefore had one less means of determining whether their votes were actually cast and scanned.

Mismatch in Date and Time Stamps on Election Returns

Various barangays were recorded to have election returns with erroneous timestamps. Timestamps are one of the security features in the automated election system (AES) to prove that the PCOS machines weren't tampered with and that the machines weren't pre-populated with fake results prior to election day.

Examples of precincts with erroneous time stamps are in Brgy. Borac in the capital, Naval, with a January 3, 2010 timestamp and in Brgy. Julita in Biliran. The PCOS audit log in the precinct in Brgy. Julita showed that Final Testing and Sealing took place on January 21, 2010 at 12:08, the elections occurred on January 24, 2010 at 12:58 a.m., and the transmission of results at 1:48 a.m.

Smartmatic, during the post-election House of Representatives Committee on Suffrage and Electoral Reform hearings[33], said that it is possible for the date and time stamps on the PCOS machines to reset, but claimed that this did not affect the credibility of the results. They said that the heading on the election return print-outs still bear the date May 10, 2010. They also suggested possible human error on why there were erroneous timestamps, and that their technicians in their main warehouse in Cabuyao, Laguna may have wrongly set the date and time stamps during the PCOS machine configuration. This reasoning, however, still doesn't allay suspicions that the programs in the AES were poorly designed and that the election results might have been inaccurate.

Plain Thermal Paper

The use of plain thermal paper in the printing of election returns in the precincts was noted in six barangays in various municipalities:

1. Brgy Bariis, Caibiran
2. Brgy Agutay, Maripipi
3. Brgy Villa Enage, Biliran
4. Brgy Villa Vicente, Caibiran
5. Brgy Poblacion, Almeria
6. Brgy Victory, Caibiran

This means that the thermal paper had no Comelec seals. Comelec Executive Director Jose Tolentino, Jr. said that the use of plain thermal paper, and in other provinces, of MasterCard, Citibank and Paylite Visa thermal papers, could be a demonstration of the BEI's resourcefulness. Smartmatic said that many precincts may have used up the official thermal papers during the Final Testing and Sealing of PCOS machines[34] . However, Chong is still at a loss how the BEIs were able to obtain plain thermal papers on election day, which are usually not easily available, especially in far-flung barangays that didn't even have telephone lines.

Transmission

a. Failure to Transmit Results

In Naval, the minutes of the municipal canvassing center proceedings show that only 11 out of 39 clustered precincts in the capital transmitted their election returns electronically. The rest were hand delivered to the canvassing center. According to a Smartmatic technician, the CF cards containing the election returns had to be fetched by a Comelec official because the precincts in his polling center had difficulty transmitting their results. The CF cards were collected by the Comelec official between 1-2 a.m. of May 11 in his polling center.

In Kawayan, the very first successful electronic transmission of results happened on May 11, at 9:44 a.m. According to Morillo's report, only five out of 23 precincts successfully transmitted their results electronically to the municipal canvassing center. A common entry on PCOS machine's audit logs were "*modem not connected to cable*". These, Morillo posited, could be the reason for the failure to transmit results. Based on our research, this could point to either an error on the part of the BEIs in installing the modems[35] or that the modems themselves were defective.

b. Transmission Logs Discrepancy

Morillo's findings on the PCOS audit logs, canvassing print logs, and MBOC logs of the municipality of Culaba point to some disturbing discrepancies. In Brgy. Bacolod, for instance, the PCOS audit log indicated a

failure to transmit the election returns to the three servers (MBOC, Comelec, KBP/PPCRV/Dominant Minority and Majority Parties servers). The failed attempts were made between 7:41 to 7:50 p.m. of May 10. This data does not match the entries on the canvassing print logs that show a successful transmission at 11:25 p.m. on the same date. An MBOC log sheet that was attached to the MBOC minutes confirmed the successful transmission. But in spite of this, based on the canvassing print log, another transmission at 11:48 p.m. was attempted by the same PCOS machine.

Another finding from the Culaba logs involved Brgy. Binongtoan. Morillo noted a successful transmission of results on the PCOS audit log at around 12:28 a.m. of May 11. This transmission, however, was recorded in the canvassing print log 10 minutes earlier at 12:18 a.m. This same log also shows a transmission attempt at 1:25 a.m., which was not reflected on the PCOS audit log.

In Brgy. Looc, after the successful transmission of results, another transmission attempt was made using a different IP address at 11:53 p.m. Morillo found this very disturbing because the last entry in the PCOS audit log was 11:34 p.m., May 10. This also happened in two precincts in Brgy. Virginia, where two transmission attempts were made, one hour and another three hours after the successful transmission of results. In Barangays Marvel and Bool West, all PCOS audit logs and canvassing print logs had time discrepancies. The timestamps on the canvassing print logs were minutes earlier than the timestamps on the PCOS audit logs.

Analysis of Statistical and Audit logs

A further analysis of statistical and audit logs made by Morillo show that discrepancies in log entries were not confined in Culaba.

In Smartmatic-TIM's technical proposal for the AES,[36] the PCOS statistical reports is said to contain the following information (emphasis supplied):

- Demographic information for the precinct (Province, City/municipality, barangay name, precinct number or clustered precinct name with the individual precinct numbers)
- **Number of registered voters for the precinct**
- **Number of voters who actually voted in the precinct** by gender and age group

The audit log records, on the other hand, contain the following information, among others:

- Machine ID
- Voting jurisdiction
- All user-generated activities indicating:
  - User ID
  - **Actual date and time stamps**
  - Specific action taken

It was Smartmatic that set the standards of an automated election system in their technical proposal for the 2010 automated elections. According to the technical proposal which they submitted to the Comelec, "*The challenge of improving the integrity, security and accuracy of a nation's electoral system **requires the most secure, reliable and auditable voting system available**.*" [Emphasis supplied]. Smartmatic claimed that among the benefits of their proposed solution is that it "*provides a reliable and 100% auditable solution.*" Smartmatic's technical proposal in answer to the Comelec's Request for Proposals/Terms of Reference for the automated election bidding was most likely one of Comelec's basis, aside from having the lowest bidding price, for awarding the automated election contract to Smartmatic.

a. Comparison of Data from PCOS Logs and BEI Minutes

However, based on an analysis of the audit logs that show significant differences between the PCOS-generated logs and the minutes of the BEIs, it appears that the audit mechanism at the precinct level is very unreliable. Using data from Morillo's report, we computed for the cumulative difference in PCOS machine logs and BEI logs for the municipality of Kawayan.

Table 7. Comparison of PCOS and BEI Logs in Kawayan

COMPARISON OF LOGS (PCOS VS BEI)	DIFFERENCE*
No. of Registered Voters	28 voters
Actually Voted	211 voters
Rejected Ballots	139 ballots

*See Annex A for actual numbers on PCOS logs and BEI's minutes

A 28-registered voter difference, 211-voter difference on actual number of voters, and 139-ballot difference on rejected ballots are wide margins for such a critical political exercise. These are also significant numbers in a political contest where the decisive factor was the narrowest of margins.

It should be noted that this analysis looked at data from only one municipality. Logs from the seven other municipalities have not been studied yet, and the extent of the inconsistencies and whether they were replicated in other areas in the province or in the country need to be looked into.

Using the canvassing print logs of Kawayan, Morillo also noted that there is no way to determine whether the election results uploaded manually in the CCS (consolidation canvassing system) in the municipal canvassing were authentic. It only shows that election returns from particular precincts had been processed, but it doesn't provide information on where and what has been manually uploaded. Furthermore, his scrutiny of the Almeria logs also show that the CCS server (in the municipal canvassing center) "*seems to have received results even before it was transmitted from the PCOS machines in the precincts.*" This is a very significant observation because aside from putting in doubt the accuracy of the timestamps, it also opens up questions on the authenticity of the election results.

Moreover, Morillo also noticed that the IP address used by two barangays, Poblacion 1 and 2, in transmitting the precinct-level election returns, were the same. This is unique from the other barangays which had different IP addresses. According to Dr. Pablo Manalastas, a CenPEG fellow and IT faculty from UP and the Ateneo de Manila University, "*every computer on a network has a hostname and IP address. The hostname is like a person's name, and the IP address is like his house number. No two houses should have the same number for, if so, the postman will have trouble delivering mail*".

b. Missing Vote Entries

Morillo's report also noted that there were instances in Kawayan and Almeria where vote entries are missing. This typically happened whenever there is a paper jam and the PCOS machine has to be restarted. Upon restarting, the log entries would usually skip one voter. For example, in Brgy. San Lorenzo in Kawayan, Voter#353, after restarting the PCOS machine, was followed by Voter#355 instead of Voter#354.

Proclamation Issues

In an affidavit, Atty. Editha Santos, Chong's election lawyer who was also present during the canvassing proceedings at the Provincial Board of Canvassing, said that there was no breakdown of figures for every municipality displayed on the board, contrary to what Comelec had told them earlier. Only the total number of votes for all municipalities was shown during the proclamation. The lack of vote breakdown consequently prevented them from comparing the figures in the canvassing center with that of the election returns they had collected from the precincts.

Atty. Japson, Biliran's election supervisor, explained that the numbers shown were only for the municipality of Biliran, and not for the whole province. This caused further confusion among those present in the canvassing center because the numbers were statistically improbable. It said on the board that there were 39,659 votes for Glenn Chong and 40,010 for Rogelio Espina, when in fact there are only 10,095 registered voters in the municipality of Biliran. Both Atty. Santos and a Pinoy Lawyers representative manifested their objections, which was followed by a manifestation by Atty. Santos of her intention to file a pre-proclamation

controversy. However, while she was in the middle of reading a section of Comelec Resolution 8804, a blackout occurred. When the lights went on, she was not given a chance to continue her manifestation, and Rep. Rogelio Espina was immediately called and proclaimed as the winning candidate.

POST-ELECTION

Interception of Contingency PCOS Delivery

On May 13, all 166 PCOS machines and 11 contingency PCOS machines assigned in the province were brought back to the Citi Hardware warehouse, Argo International Forwarder's regional hub in Tacloban City. According to Chong's supporters, they themselves were present during the inventory in Tacloban City and that all PCOS machines had been accounted for. This was also confirmed to them by Argo's warehouse supervisor, Mr. Ronie Turalde.

However, on May 14, two PCOS machines and two Broadband Global Area Network (BGAN) were intercepted by Chong's supporters in Naval while being delivered from Kawayan to Citi Hardware's warehouse in Tacloban City. A documentation pointed to Kawayan's Election Officer as having authorized the release of the two PCOS machines. In her letter to Chong, she said that the two PCOS machines were unutilized contingency machines without CF cards. However, the affidavits of those who intercepted the machines attest that upon checking the machines, they saw that they still contained CF cards. This also negates Atty. Japson's May 13 statement that there were no contingency PCOS delivered to Kawayan. Chong's camp and other concerned Biliranons suspect that these PCOS machines were used in committing electoral fraud in favor of the Espinas.

Random Manual Audit

The Random Manual Audit was a requirement under RA 9369 or the Automated Election Law. It obliged the manual auditing of votes in five precincts for every congressional district for a total of 1,145 precincts nationwide immediately after the elections. The task of the Random Manual Audit Team (RMAT), composed of PPCRV volunteers and teachers, is to countercheck the accuracy of the machine count through manual counting of ballots. The actual random manual audit, however, covered only 1,046 precincts and the results were not released until end of July.

Project 3030 Research and CenPEG Fellow Dr. Felix Muga II made an analysis of the numbers and computations used by the RMAT. In RMAT's presentation of their findings, they concluded that there were no considerable variance between the AES count and manual audit, making the results of the AES credible. This finding, in a way, absolved COMELEC and Smartmatic from allegations of fraud and election irregularities that were thrown at them.

Dr. Muga analyzed the RMA numbers' accuracy by applying them to various contests last elections, including that of the congressional race between Chong and Rogelio Espina. According to Dr. Muga, if we are to adapt RMAT's accuracy rate of 99.640 percent, error rate of 0.360 percent, and margin of error of plus or minus 295 on the total number of voters in the province at 82,127, the results will reveal that the race is statistically tied between Chong and Espina. This can only mean one of two things: (1) either the accuracy rate used by RMAT does not really determine the accuracy of the AES vote counts or (2) that the AES vote counts were incorrect (See Dr. Lex Muga's RMA Report).

Electoral Protest

"Where are our votes? Comelec: The people of Biliran want a manual recount" are spelled out on a placard posted by picketers outside the Biliran provincial capitol. To this day, the Biliranons have been on a vigil in the capitol and in front of their municipal treasurers' offices. A big prayer rally was also held on June 21, 2010 as a

culmination of their vigil in front of the capitol. The PPCRV in Biliran had also written to the Comelec condemning the alleged electoral irregularities in the province. Their local coordinator, Fr. Marvyn Maceda, wrote in a report: "*We strongly recommend that these allegations of massive cheating not only in the province of Biliran but also in other places, be looked into by the Comelec, especially if these allegations involving the PCOS machines and memory cards: the very hearts of our automated elections*"[37].

The Espinas prefer to keep quiet in the midst of the election controversy. Atty. Japson, Biliran's election supervisor, just laughed off allegations that he received Php 15 million to rig the results of the elections for the Espinas. He said that if he really did receive Php 15 million, he would have been out of the country by now. He insists that his conscience is clear[38]. Comelec Regional Director Nick Mendros firmly believes that there were no irregularities in the elections in Biliran and that the cheating charges are just the losing candidates' sourgraping.[39]

Meanwhile, Atty. Chong formally filed an electoral protest at the House of Representatives Electoral Tribunal (HRET) and the Comelec in his quest to get permission for the ballots to be reopened and manually counted. He also filed individual criminal and administrative cases against certain BEIs and Comelec officials. Local candidates such as Kawayan mayoralty candidate Caridad Ang also filed electoral protests at the Regional Trial Court.

Chong's case in Comelec was initially dismissed on the grounds that his camp didn't have a copy of the Statement of Votes (SOV), which turned out to be among the requirements in the filing of a protest. However, Chong said that they were not provided with an SOV during the provincial canvassing proceedings. The distribution of SOVs is supposed to be a prerequisite before a proclamation is held. The protest case at the HRET, meanwhile, is gaining ground after it was deemed sufficient in form and substance. Unlike Comelec, an SOV is not a requirement in HRET. The preliminary conference was held last August 26. And on September 2, an order for the retrieval of ballot boxes was made. The Espina camp had objected to the opening of ballots.

Chong and his supporters are currently waiting for an order of payment[40]. They estimate that the costs for the opening of ballots would reach Php 1 million. In order to pay for this, his supporters have been collecting funds in the province. They have now collected Php 837,000. A petition to the Comelec, led by Sister Erlinda Lanigao, chairperson of the Association of Women Religious of Naval, urging the election authority to allow the recount of ballots, was also passed around Biliran province. Sr. Erlinda Lanigao, incidentally, was also present during the provincial canvassing proceedings as the local representative of PPCRV. The petition gathered 26,000 signatures. Another avenue resorted to by the petitioners was to write a letter to President Benigno S. Aquino III last July 2, 2010. In the letter, the petitioners wrote, "*We have exerted efforts to do all legal means to be heard and to manifest our protest and petition for manual recount of the ballots. We believe this is the only means to find the TRUTH which is kept in those ballot boxes.*"

A recent development in the province was the alleged harassment being done against the people on vigil in front of the Municipal Treasurer's Offices, particularly in Kawayan. There was also an attempt made by Mayor Gerry Espina to charge the demonstrators with illegal assembly.

Synthesis

How are fraud allegations proven in an automated system of voting? What are the evidences that can be used to substantiate such claims? In manual elections, it was easier to catch a person cheating or notice an intent to cheat. But in the automated elections, where the counting and canvassing of votes are mostly hidden from plain view, the burden of proof is on the complainant, and unearthing evidence has proven to be much more challenging.

One such evidence that can be used is the audit logs. In order to get the trust of the Comelec and the people on the technology being sold, Smartmatic had promised that the AES will provide a "*100 percent reliable and auditable solution.*" Among the minimum system requirements of the AES as stated on RA 9369 is the

provision of "*a system of verification (for the voter) to find out whether or not the machine has registered his choice.*" Another requirement on the law was "*a system auditability which provides supporting documentation for verifying the correctness of reported election results*". However, it seems Comelec and Smartmatic did not come through on its promise. One of the verification mechanisms, the voter verifiability feature of the PCOS machine, was disabled by Comelec, while the discrepancies on audit logs and canvassing print logs provided by Smartmatic make them unreliable.

The PCOS voter verifiability feature has two functions: First, its Cast and Return buttons were supposed to give the voters an option to edit their ballot markings so that their choice, as they intended, will be properly read and counted. Second, the feature was supposed to display on the PCOS LCD screen how the votes were read from the ballots. This could have provided comfort to the voters that their votes were properly registered despite the fact they didn't personally witness the counting process inside the machine. This voter verifiability feature in the PCOS machine, however, was disabled by the Comelec. It said that this is not needed because the ballot itself was already a voter verified paper audit trail. Besides, it claimed that enabling the feature would only slow down the whole voting process.

The other examples of layers of election audit trail are the PCOS election returns, PCOS audit logs and statistical reports. These can be used to check if the results in the canvassing centers were padded by comparing them with the Statement of Votes (SOV) or Certificate of Canvass (COC). Canvassing print logs can also be used to review if the status of transmissions reported were accurate.

Although the AES provided these layers of audit mechanisms, the discrepancies and inconsistencies found on such mechanisms rendered them unreliable. Instead the audit logs now only serve as proof of how poorly designed are the programs used in the AES. That the design was poorly made is relatively easy to establish, but proving fraud in an automated elections with unreliable layers of audit trail can be quite tricky. In this light, in investigating electronic fraud and assessing the country's very first automated elections, what can be considered as the last resort would be the examination of what looks like the only reliable layer of voter verified paper audit trail, the ballots.

The avalanche of evidentiary documents that point to election irregularities in such a small province is very striking. Was Biliran province's election experience an anomaly that doesn't quite fit into the whole "successful" national and local elections jigsaw puzzle or was it the norm? The electoral protest filed and the investigative work done by Chong's supporters shed light on irregularities we otherwise wouldn't have known. But are these isolated cases or are we only scratching the surface? Were these replicated in other areas in the country where there were no electoral protests that would necessitate the examination of election documents?

Whether fraud was committed or not, there is an urgent need to dig deeper into these allegations and cast a wider net in assessing the very first automated national and local elections. The log discrepancies alone speak volumes about the accuracy and security of the system and the integrity of the 2010 elections, at the very least in Biliran province. And the only proper recourse to erase any trace of doubt and suspicion is to conduct a truly independent and comprehensive assessment of the AES. This is a necessity or else the very system itself can be a major threat to the basic right of suffrage. ***EU-CenPEG Project 3030***

End Notes

1   Atty. Alvin Richard N. Japson is also COMELEC's Region VIII Legal Officer.

2   *About 4,000 Biliranons conduct rally in protest of election results*, Philippine Information Agency Region 8, May 13, 2010, <www.samarnews.com/news2010/may/a204.htm>, accessed September 1, 2010

3   <biliranisland.com/blogs/?p=1747>, accessed September 1, 2010

4   Ibid.

5   <biliranisland.com/blogs/?p=1861>, from a comment posted on the blog, accessed September 1, 2010

6   < http://en.wikipedia.org/wiki/Biliran>

7   <http://www.census.gov.ph/data/census2007/index.html>, accessed September 1, 2010

8   *Which provinces did best in reducing poverty?* Dr. Romulo A Virola, <http://www.gmanews.tv/sona2006/state_provinces.php>, accessed September 1, 2010

9   <en.wikipedia.org/wiki/Biliran>

10 *Geothermal Project Seen to Bring Huge Profits to Biliran*, <www.gmanews.tv/story/107644/Geothermal-project-seen-to-bring-huge-profits-to-Biliran>, July 18, 2008, accessed September 3, 2010

11 *Envent Converts from Geothermal to Renewable Energy Contractor*, Donnabelle L. Gatdula, <http://www.philstar.com/Article.aspx?articleId=546651>, February 5, 2010, accessed September 3, 2010

12 <en.wikipedia.org/wiki/Sulfur>, accessed September 1, 2010

13 *Tyro Beats Espina Patriarch in Biliran*, Rolando O. Borrinaga, first posted May 19, 2007, <newsinfo.inquirer.net/breakingnews/regions/view/20070519-66771/Tyro_beats_Espina_patriarch_in_Biliran>, accessed July 20, 2010

14 *How Dynasties Fared in the May 2010 Elections*, Karen Tiongson-Mayrina, <www.gmanews.tv/story/196498/how-dynasties-fared-in-the-may-2010-elections>, July 20, 2010 , accessed September 1, 2010

15 Interview with Atty. Glenn Chong, June 23, 2010

16 *Biliran Gov Distances Self from Parilla Killing*, <www.gmanews.tv/story/14904/biliran-gov-distances-self-from-parilla-killing>, accessed September 1, 2010

17 <en.wikipedia.org/wiki/Glenn_Chong>, accessed September 1, 2010

18 *Climate of Terror in Biliran*, Rolando O. Borringa, <newsinfo.inquirer.net/inquirerheadlines/regions/view/20080614-142607/Climate-of-terror-in-Biliran>, posted June 14, 2008, accessed September 3, 2010

19 Ibid.

20 Ex-*Biliran Mayor Lines Up with Chongs in 2010 Polls*, Lemuel Pagliawan, <www.tourleyte.com/ex-biliran-mayor-lines-up-with-chongs-in-2010-polls.html>, accessed September 1, 2010

21 *Representative 'Kalsada', Rodrigo S. Victoria*, PIA Biliran, <www.samarnews.com/Special_report/specialreport18.htm>, January 15, 2008, accessed September 1, 2010

22 National and Local 2010 Elections Technical Specifications, Smartmatic-TIM, May 4, 2009

23 The different canvassing levels were municipal/city canvassing level, provincial canvassing level, and national canvassing level.

24 Among the basis for re-clustering of precincts, according to Comelec Commissioner Gregorio Larrazabal, was the claim of Smartmatic that the PCOS machine can accommodate up to 1,000 voters. The precincts were re-clustered to maximize the PCOS machine's capacity.

25 Voter turnout rate = no. of actually voted/no. of registered voters x 100

26 *Philippine Poll Body Says Voter Turnout at 75 Pct*, <www.reuters.com/article/idUSMNA00274120100510>, posted May 10, 2010, accessed September 1, 2010

27 Terms of Reference/Request for Proposal III. GENERAL POLICIES, RULES AND GUIDELINES, Item No. 2 Final Testing and Sealing, Commission on Elections

28 The May 3 CF card incident refers to the May 3, 2010 Final Testing and Sealing of PCOS machines that led to the discovery of wrongly configured CF cards. The CF cards were recalled and reconfigured as a result of this incident. A CF card is precinct-specific and gives the PCOS machine its identity. For example, a PCOS machine can only be used by Precinct A if the CF card for Precinct A was inserted in the CF card slot. The PCOS machine is virtually rendered useless without the correct CF card.

29 Terms of Reference III. General Policies, Rules and Guidelines, Item No. 2, Final Testing and Sealing, Commission on Elections

30 Sec. 3 of Com. Res. 8758, promulgated on Feb. 4, 2010, "*Prohibited Campaigning - It is unlawful for any person, whether or not a voter or a candidate, or for any political party, or association of persons to engage in an election campaign or partisan political activity on Maundy Thursday, Good Friday, eve of election day and on election day.*"

31 Sec. 19, RA 9369: "*The election returns transmitted electronically and digitally signed shall be considered as official election results and shall be used as the basis for the canvassing of votes and the proclamation of a candidate.*"

32 May 20, 2010 Transcripts, House of Representatives Committee on Suffrage and Electoral Reforms . The House Committee on Suffrage and Electoral Reforms of the 14th Congress was chaired by Rep. Teodoro Locsin. Atty. Glenn Chong was among the complainants who presented his evidence of alleged fraud and PCOS machine manipulation during the hearings.

33 Ibid.

34 Ibid.

35 Our research in other parts of the country revealed that modems were not available during the BEI trainings, and that the BEIs were not taught how to install the modems in the PCOS machines.

36 National and Local 2010 Elections Technical Specifications, Smartmatic-TIM, May 4, 2009

37 *Computerization Complicates Election Protests*, Kristine L. Alave, Inquirer.net, May 22, 2010, accessed June 15, 2010

38 *Biliran Elections Supervisor Denies Rigging Poll Results*, Leyte-Samar Daily Express, <http://biliranisland.com/blogs/?p=1774>, May 28, 2010, accessed September 5, 2010

39 Interview with COMELEC Regional Director Jose Nick Mendros, June 16, 2010

40 The complainant who filed the electoral protest is required to pay for the costs of the manual recount of ballots.

ANNEXES

ANNEX A: COMPUTATION TABLES

Comparison of Statistical Data from Ferdinand Morillo's Report

	Brgy	PCOS STATISTICAL REPORT				BEI STATISTICAL DATA			
		No. of Reg. Voters	Actually Voted	Rejected Ballots	Overvotes	No. of Reg. Voters	Actually Voted	Rejected Ballots	Overvotes
1	Poblacion	812	700	0	269	816	708	8	n/a
2	Baganito	354	294	0	99	357	329	6	n/a
3	Balacson	597	510	0	199	597	529	19	n/a
4	Balite	698	587	0	192	698	596	9	n/a
5	Bilwang	409	355	0	153	410	356	1	n/a
6	Bulalacao	519	436	0	150	519	443	7	n/a
7	Burabod	405	354	0	219	405	366	12	n/a
8	Buyo	497	440	0	292	499	450	4	n/a
9	Inasuyan	739	625	0	276	740	635	12	n/a
10	Kansanok	507	436	0	294	511	448	12	n/a
11	Madao	670	563	0	374	671	570	7	n/a
12	Mapuyo (34A-36A)	619	523	0	316	619	530	7	n/a
13	Mapuyo (37A-38B)	n/a	n/a	n/a	n/a	523	410	8	n/a
14	Masagaosao	498	435	0	118	499	446	2	n/a
15	Masagongsong	476	415	0	138	476	420	5	n/a
16	San Lorenzo**	726	626	n/a	n/a	728	591	2	n/a
17	Tabunan-North	152	133	0	46	152	133	0	n/a
18	Tubig-Guinoo	469	394	1	184	473	404	12	n/a
19	Tucdao (53A-56A)	659	542	0	407	659	551	12	n/a
20	Tucdao (57A-59B)	522	416	0	203	524	418	No data	n/a
21	Ungale (60A-62B)	628	550	0	340	628	552	2	n/a
22	Ungale (63A-65B)	705	594	0	364	707	594	No data	n/a
23	Villacornejo	644	549	0	343	645	549	3	n/a

Source: *"Data Analysis Report for the Municipality of Kawayan, Biliran Province"* by Ferdinand Morillo

TOTAL DATA DIFFERENCE FROM PCOS AND BEI LOGS

#	Brgy	PCOS No. of Reg Voters	BEI No. of Reg Voters	Difference	PCOS Actually Voted	BEI Actually Voted	Difference	PCOS Rejected Ballots	BEI Rejected Ballots	Difference
1	Poblacion	812	816	4	700	708	8	0	8	8
2	Baganito	354	357	3	294	329	35	0	6	6
3	Balacson	597	597	0	510	529	19	0	19	19
4	Balite	698	698	0	587	596	9	0	9	9
5	Bilwang	409	410	1	355	356	1	0	1	1
6	Bulalacao	519	519	0	436	443	7	0	7	7
7	Burabod	405	405	0	354	366	12	0	12	12
8	Buyo	497	499	2	440	450	10	0	4	4
9	Inasuyan	739	740	1	625	635	10	0	12	12
10	Kansanok	507	511	4	436	448	12	0	12	12
11	Madao	670	671	1	563	570	7	0	7	7
12	Mapuyo (34A-36A)	619	619	0	523	530	7	0	7	7
13	Mapuyo (37A-38B)	n/a	523		n/a	410		n/a	8	
14	Masagaosao	498	499	1	435	446	11	0	2	2
15	Masagongsong	476	476	0	415	420	5	0	5	5
16	San Lorenzo**	726	728	2	626	591	35	n/a	2	
17	Tabunan-North	152	152	0	133	133	0	0	0	0
18	Tubig-Guinoo	469	473	4	394	404	10	1	12	11
19	Tucdao (53A-56A)	659	659	0	542	551	9	0	12	12
20	Tucdao (57A-59B)	522	524	2	416	418	2	0		
21	Ungale (60A-62B)	628	628	0	550	552	2	0	2	2
22	Ungale (63A-65B)	705	707	2	594	594	0	0		
23	Villacomejo	644	645	1	549	549	0	0	3	3
	TOTAL			28			211			139

*Calculations by Project 3030 Research Team

ANNEX B: LETTER TO PRESIDENT BENIGNO AQUINO III BY
"CONCERNED PEOPLE OF BILIRAN PROVINCE"

PROVINCE OF BILIRAN
6543 Naval, Biliran

July 2, 2010

His Excellency
President Benigno "Noynoy" C. Aquino, III
Office of the President
Malacanang Palace
MANILA

Dear Mr. President:

Greetings of PEACE and warmest CONGRATULATIONS to you, our dear new President!

We came all the way from Biliran Province for a very important cause, that is, in *search for truth and justice* which the May 10, 2010 automated election has challenged us to do. We also took the rare opportunity to witness your inauguration as the new president of our beloved Philippines. We listened attentively to your heart-warming and inspiring inaugural address. We are so happy to know that one of the significant points of your speech is to *eradicate graft and corruption and enhancement of good governance*. It is a promise that we, the *Biliranons* want to hold on to, because for the past 12 years we have suffered so much poverty, harassment, human rights abuses and most of all adverse effects of corrupt governance under the leadership of the Espina dynasty.

Mr. President, in the 2007 elections we had a ray of hope when a new congressman in the person of Atty.Glenn A. Chong was elected. In his 3-year term he did a lot to make a difference in the life of many *Biliranons* most especially the students in all levels. School uniforms and bags for the elementary pupils, free ride in school buses for the high school students and scholarship for 1,600 college students among other projects which the *Biliranons* have enjoyed and benefited. However, in the recent automated elections such *hope* was *grabbed* from us again by the Espinas. The massive fraud, irregularities, cheating and manipulation of the election process as manifested in the evidences we have submitted to the COMELEC would prove how the TRUTH was twisted and overturned.

The poor and ordinary people as well as professionals and small-scale entrepreneurs went to the streets for the first time in the history of Biliran Province . In a peaceful prayer rally on June 21, 2010, they expressed their sentiments, grievances and frustrations on the Election 2010 results as a culmination activity of the one-month long Prayer Vigil in front of the Provincial Capitol in Naval, Biliran. We have exerted efforts to do all legal means to be heard and to manifest our protest and petition for **manual recount of the ballots**. We believe this is the only means to find the TRUTH which is kept in those ballot boxes. However, we are quite apprehensive that this petition will go nowhere after going through

the intricate legal procedures. We are afraid that the *people's will would never come to light* because of *"legal technicalities"* after experiencing being passed and pushed from one office to another in the COMELEC head office. We feel more deprived and denied than helped by those in authority in our quest for TRUTH.

Mr. President, today, two (2) days after the oath-taking of the winning officials in our province, series of atrocities and harassments are happening in the different towns of Biliran. Our brothers and sisters out there who have been patiently watching the ballot boxes 24 hours a day are being harassed by armed men most probably hired by the Espinas who will do all means to stop the petition for manual recount. Now that the Espinas and their political allies are in control of the whole province except the municipality of Naval, they can do anything they want, and majority of our people will continue to live in fear and deprivation.
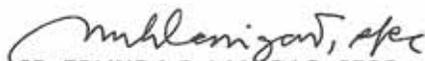
At this point in time, the people of Biliran Province cannot remain silent. They have reached the "boiling point" and we are afraid that there would be *bloodshed* if they would be denied of the TRUTH they have been searching for... What will happen to the future of our young ones??? For the past 12 years the Espinas claimed that they have made Biliran a progressive province. It might be true to a certain extent, but the reality is: they themselves have become richer and more powerful instead, at the expense of the *Biliranons*. Just recently, the *Bando Espina,* represented by Rogelio J. Espina of the House of Representatives, took allegiance to the Liberal Party. We hope that their being in the Liberal Party will not taint the integrity of your new administration.

Finally, Mr. President, we pray that in behalf of the Concerned People of Biliran Province, we look up to you as our source of hope and that *our quest for truth and justice be given prior attention and speedy action.* Yes, we are a very small province, but in our own little way, we can contribute to the realization of the dream and vision of your new administration towards a NEW PHILIPPINES. Assuring you of our support and prayers for the success of your administration.

Thanking you in anticipation for your immediate response to our appeal. We remain

Respectfully yours,

CONCERNED PEOPLE OF BILIRAN PROVINCE

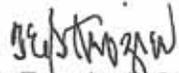SR. ERLINDA B. LANIGAO, SFCC
Chairperson
Association of Women Religious of Naval
Diocese of Naval
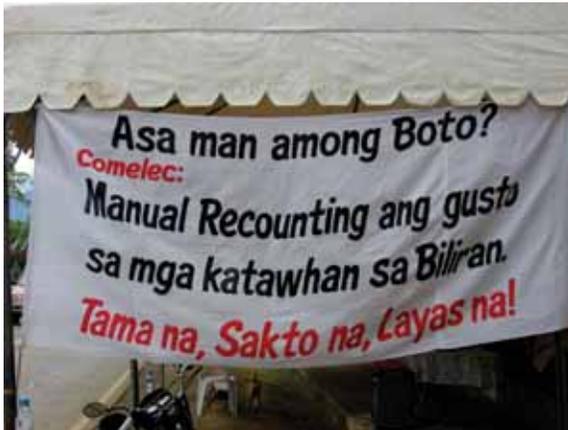6543 Naval, Biliran

ISMAEL D. GALICIA, JR.
Community Leader
People's Organization
Bliss, Calumpang, Naval
Province of Biliran

SR. GLORIA CARMEN M. EAMIGUEL, FMM
Coordinator, FMM-JPIC
JPIC Office, 225, 2nd Floor St. Anthony Bldg.
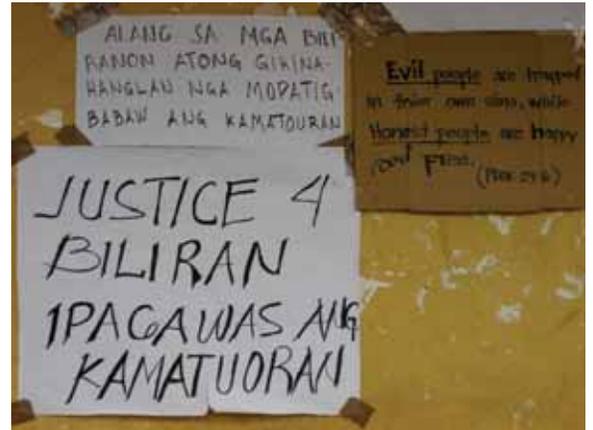Aurora Blvd., Cubao, Quezon City

Mrs. Teresita E. Strozier
Founder/ Adviser
Navalian Association of USA

Cc: Chairperson, Commission on Human Rights
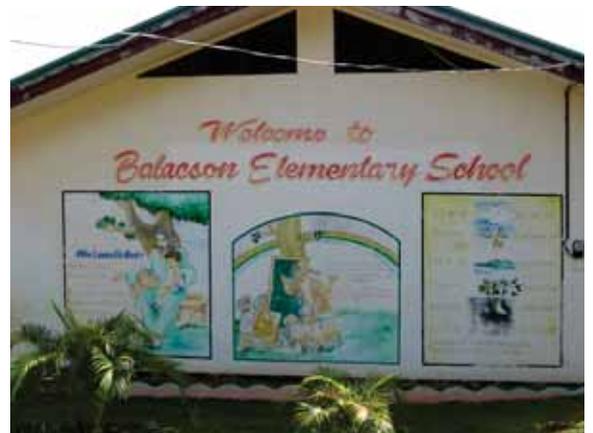   Secretary, Department of Justice
    AMRSP

ANNEX C: PHOTOS

Protest sign in front of the Biliran provincial capitol that read, "*Where are our votes? Comelec: The people of Biliran want a manual recount. Enough, go away!*" *(Photo by EU-CenPEG Project 3030)*

Another sign read, "*Justice for Biliran. Reveal the truth.*" *(Photo by EU-CenPEG Project 3030)*

The Kawayan Municipal Treasurer's Office where the May 10, 2010 official ballots are kept. Protesters have been keeping vigil in front of the office to safeguard the ballots if a manual recount has been granted. *(Photo by EU-CenPEG Project 3030)*

Elections in the Precinct in Balacson Elementary School in the municipality of Kawayan started at 7:30 a.m. of May 10, 2010 and ended on May 11, about 12 p.m. *(Photo by EU-CenPEG Project 3030)*

Inside the Kawayan Municipal Office where the municipal canvassing proceedings for the May 10, 2010 elections took place. *(Photo by EU-CenPEG Project 3030)*